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IMPROVING ACCESS TO PRESCHOOL AND POSTSECONDARY EDUCATION

HEARINGS

BEFORE THE

SUBCOMITTEE ON EDUCATION AND HEALTH

OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

ONE HUNDREDTH CONGRESS

SECOND SESSION

DECEMBER 14 AND 15, 1988

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CONTENTS

WITNESSES AND STATEMENTS

Wednesday, December 14, 1988

Page

Scheuer, Hon. James H., chairman of the Subcommittee on Education and Health: Opening statement ... 1

Snowe, Hon. Olympia J., member of the Subcommittee on Education and Health: Opening statement ... 29

Williams, Hon. Pat, a U.S. Representative in Congress from the First Congressional District of the State of Montana: Opening statement ... 30

Brademas, Hon. John, president, New York University ... 36

Lowey, Hon. Nita M., a U.S. Representative-elect to Congress from the 20th Congressional District of the State of New York: Opening statement ... 78

McKernan, Hon. John R., Governor, State of Maine ... 84

Sugarman, Hon. Jule M., secretary, Department of Social and Health Services, State of Washington ... 95

Watkins, Adm. James (retired), U.S. Navy, and former chairman, President's Commission on AIDS ... 120

Donley, Edward, chairman, executive committee, Air Products & Chemicals, Inc., and member, board of directors, U.S. Chamber of Commerce, on behalf of the U.S. Chamber of Commerce, accompanied by Karen A. Berg, associate manager of employee relations for the chamber ... 138

Semerad, Roger D., senior vice president, American Express Co ... 148

MacAllister, Jack, chairman and CEO, U S WEST ... 168

Murphy, James P., executive vice president, New York State Bankers Association, and chairman, board of trustees, City University of New York ... 174

Woodside, William S., chairman, Sky Chefs, Inc.; president, Primerica Foundation; and chairman, board of directors, Institute for Educational Leadership ... 195

Reischauer, Robert D., senior fellow, the Brookings Institution ... 215

Prestowitz, Clyde, senior associate, Carnegie Endowment for International Peace ... 253

Thursday, December 15, 1988

Scheuer, Hon. James H., chairman of the Subcommittee on Education and Health: Opening statement ... 269

Atwell, Robert H., president, American Council on Education ... 274

Dertouzos, Michael L., director, Laboratory for Computer Science, Massachusetts Institute of Technology, Cambridge, MA ... 283

Eaton, Judith S., president, Community College of Philadelphia, and chairwoman, board of directors, American Council on Education ... 297

Trachtenberg, Stephen Joel, president, George Washington University, Washington, DC ... 306

Silber, John, president, Boston University ... 321

Blair, Stephen J., president, National Association of Trade and Technical Schools ... 348

Newman, Frank, president, Education Commission of the States ... 363

Shalala, Donna E., chancellor, University of Wisconsin at Madison ... 378

Smith, Hoke L., president, Towson State University, Towson, MD ... 395

Cohen, Audrey, president, the College for Human Services, New York, NY ... 409

SUBMISSIONS FOR THE RECORD

Wednesday, December 14, 1988

Page
Blanchard, Hon. James J., Governor, State of Michigan: Statement 262
Brademas, Hon. John:
  Prepared statement 50
  Article entitled "The Ascent of Higher Education" 70
  Observations on the student loan default problem 75
D'Amato, Hon. Alfonse M.: Written opening statement 31
Donley, Edward: Prepared statement 140
MacAllister, Jack: Prepared statement 171
McKernan, Hon. John R.: Prepared statement 87
Murphy, James P.: Prepared statement 178
Reischauer, Robert D.: Prepared statement, together with an attachment 218
Scheuer, Hon. James H.:
  Charts reflecting high school graduates enrolled in college, 1976-86; and change in 4-year postsecondary costs and family income, 1980-87 4, 5
  A staff analysis entitled "A Cost-Benefit Analysis of Government Investment in Postsecondary Education Under the World War II GI Bill" 7
Semerad, Roger D.: Prepared statement 151
Sugarman, Hon. Jule M.: Prepared statement 98
Watkins, Adm. James (retired):
  Section III from the report of the President's Commission on AIDS 123
  Article entitled "AIDS, Youth, and the University" 129
Woodside, William S.: Prepared statement 198

Thursday, December 15, 1988

Atwell, Robert H.: Prepared statement 277
Blair, Stephen J.: Prepared statement 354
Cohen, Audrey:
  Prepared statement 414
  Article entitled "The New Service Economy and Its Implications for the Future" 427
Dertouzos, Michael L.: Prepared statement 289
Eaton, Judith S.: Prepared statement 301
Murphy, Joseph S., chancellor, City University of New York: Statement 433
Newman, Frank: Prepared statement 371
Shalala, Donna E.: Prepared statement 383
Silber, John: Prepared statement 326
Smith, Hoke L.: Prepared statement 400
Trachtenberg, Stephen Joel: Prepared statement 311

IMPROVING ACCESS TO PRESCHOOL AND POSTSECONDARY EDUCATION

WEDNESDAY, DECEMBER 14, 1988

Congress of the United States,
Subcommittee on Education and Health
of the Joint Economic Committee,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room 2359, Rayburn House Office Building, Hon. James H. Scheuer (chairman of the subcommittee) presiding.

Present: Representatives Scheuer, Snowe, Williams, and Lowey.

Also present: Deborah Matz, professional staff member.

OPENING STATEMENT OF REPRESENTATIVE SCHEUER, CHAIRMAN

Representative Scheuer. I am delighted to welcome all of you to this first day of a 2-day hearing on improving access to preschool and postsecondary education. This should be a marvelous 2 days of hearings.

I am particularly pleased and honored that Congressman Pat Williams, chairman of the Postsecondary Education Subcommittee of the House Education and Labor Committee, will be joining us on both days and sharing with me equally in the conduct of these hearings.

Congressman Pat Williams, is today—and I say "today" advisedly, because our opening witness held that mantle a decade or two ago—the champion of postsecondary education in the House of Representatives. While the Joint Economic Committee is holding hearings on the economic significance to our country of improved access to preschool and postsecondary education—and that is our proper function—once we finish the clarion call, then the time for legislative action is with us and the mantle of responsibility passes to Chairman Williams and his subcommittee and they are in the catbird seat.

Talking about birds, I'm a little sparrow chirping away up here, but Congressman Pat Williams is a 600-pound canary. When it comes to legislation, he is the voice that is listened to. I couldn't be more pleased that he is joining me here today.

These hearings are the last 2 days of an 11-day set of hearings. We have a published report on our first 9 days of hearings on the subject of what our country has to do to produce a competent, skilled, and competitive work force so that we can regain our educational eminence and regain our posture of successful competitor in world commerce.

The report of these hearings entitled "The Education Deficit," which is being released today and is available, makes several points. It calls, among other things, for making early childhood education universally available to American kids. That is not the situation now. The situation now is that middle and upper class children receive early childhood education. Those are the kids who need it the least. The kids who need it the most, from poorer and educationally and culturally deprived families, are getting it the least. That is one of the major problems we are here to address.

The report also calls for lengthening the school year—keeping schools open evenings, weekends, holidays, and summers; not only for kids, but also for the use of the community.

It calls for a greater effort to teach higher order skills in school, that is; not only the basic literacy skills of reading, writing, and math, but also teaching children how to think and how to learn; how to solve problems.

The report calls for viewing schools as capital investments in the communities which should be used intensively for a wide variety of civic and community needs such as alcohol, drug, job counseling, and adult literacy programs.

It calls for updating vocational education programs and increasing the quality and availability of on-the-job training.

In addition, the report recommends that we consider an entitlement to all qualified students for up to 4 years of postsecondary education. In effect it would be extending public education 4 years up, and we have already recommended that we extend it 2 years down, as well.

I am going to read you a few sentences from a Presidential commission which evaluated the Nation's higher education needs and recommended that, "The time has come to make education through the 14th grade available in the same way that high school education is now available." This would be a simple 2-year extension of the public education system from kindergarten through 12 to kindergarten through 14.

The report elaborates:

"We have proclaimed our faith in education as a means of equalizing the conditions of men. But there is grave danger that our present policy will make it an instrument for creating the very inequalities it was designed to prevent. If the ladder of educational opportunity rises high at the doors of some youth and scarcely rises at all at the doors of others, while at the same time formal education is made a prerequisite to occupational and social advance, then education may become the means, not of eliminating race and class distinctions, but of deepening and solidifying them. It is obvious that free and universal access to education in terms of the interest, ability, and need of the student must be a major goal in education. The time has come to make education through the 14th grade available in the same way that high school education is now available."

That doesn't mean loans or grants. What it means is a simple extension of high school, a simple right to 14 years of education rather than 12.

You are wondering which President may have issued this report. I hope you are. It wasn't the last one. This prophetic message was actually written in 1947 by the Truman Commission on Higher Education.

In the early 1900's, when we started public education for kindergarten through 12, that was considered an appropriate level of education for a country just barely beginning to move into the industrial age. We were basically an agricultural country with a very modest skills requirement on the part of its workers. By 1947, the Presidential commission that I just quoted felt that K through 12 would not be sufficient to meet the needs of a postindustrial nation.

That report was issued about halfway through the 80 years that have taken place since 1910 and the current date—the start of our public education system K through 12 and the present.

Around the halfway point, 1947, the Presidential commission was saying that we need to do better than that; we need to go 2 years higher in universal availability of postsecondary education.

Yet here we are four decades later and we haven't even begun seriously to debate this issue.

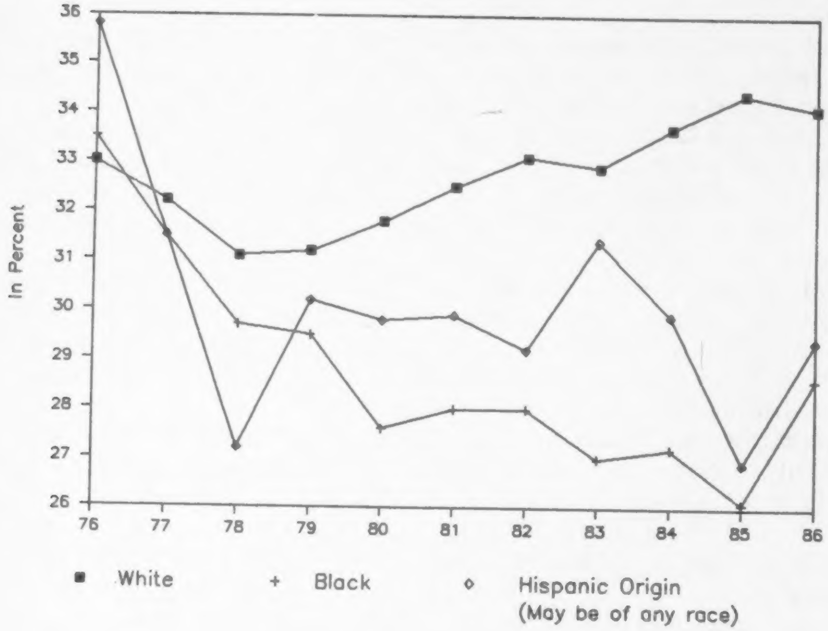
Well, we are debating it today. It seems obvious that kindergarten through grade 12 education, which probably was adequate for a predominantly agricultural work force over three-fourths of a century ago, is simply obsolete in terms of today's complex and sophisticated high-tech work force.

Minorities constitute an ever-increasing proportion of public enrollments. Yet the percent of high school graduates enrolled in college is well below the levels of a decade ago. Increases in postsecondary costs in constant dollars, even in public institutions and the least expensive of them, the black colleges, far outstripped the rise in family income in the 1980's. There is no doubt that if this nation is to continue to prosper these trends must be reversed.

[Charts pertaining to the above colloquy follow:]

Chart 1

High School Graduates Enrolled in College
1976 - 1986

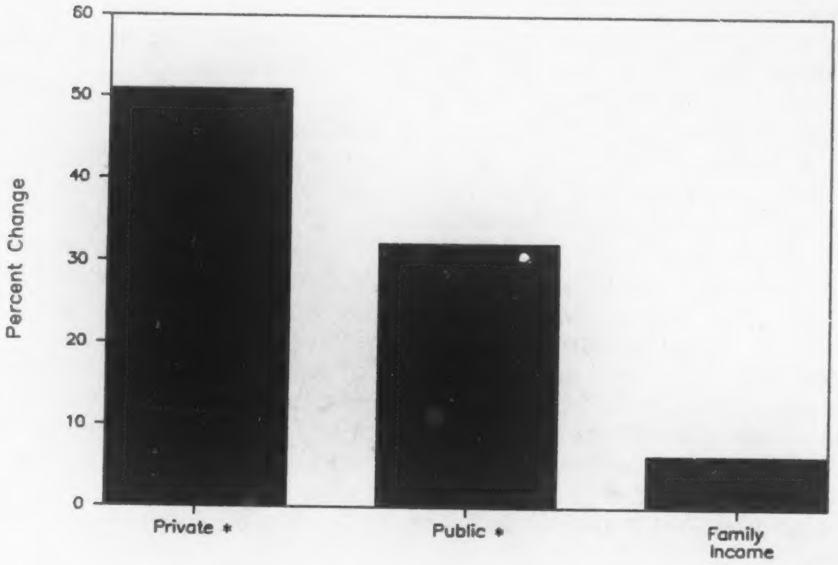


Source: Current Population Reports, Bureau of the Census, August 1988

Chart 2

Change in Four Year Postsecondary Costs and Family Income 1980 –1987

In 1986 Dollars



* Average of universities and four year colleges

Sources:

Data on college costs: Digest of Education Statistics, Department of Education, 1988

Data on family income: Current Population Reports, Bureau of the Census, 1988

Representative **Scheuer**. It is clear to me that we must assure a higher education opportunity for all students just as we did for returning soldiers after World War II.

According to a cost-benefit analysis that has just been completed by William Buechner, one of the Joint Economic Committee's top economists, the rate of return vastly exceeded the Government investment in that program by a factor of between 5 and 12 to 1, depending on the circumstances. And that didn't even count the return to the Government of the cost of education from that veteran as he worked through his working life from the increased taxes that he paid.

It was one of most spectacularly attractive and profitable investments our country has ever made in its youth. The benefits would be obvious today if we replicated that kind of a program.

The lives of the recipients would be enriched and they would be better citizens with greater earning potential.

The investment would be repaid many times over in terms of increased wages and taxes and reductions in social service outlays, including some expenditures in the criminal justice system.

Most important of all, the additional infusion of trained workers into our economy would greatly increase our competitive posture in the world once again when we urgently and desperately need it. And that is the real payoff.

It was the infusion into our society of millions of trained workers, engineers, scientists, mathematicians, accountants, and other professionals who flowed from the GI bill of rights into our society that fueled our explosion of progress into the postindustrial economy following World War II. We must do that again.

[The cost-benefit analysis referred to by Representative Scheuer follows:]

A COST-BENEFIT ANALYSIS OF GOVERNMENT INVESTMENT IN POST-SECONDARY EDUCATION UNDER THE WORLD WAR II GI BILL

A staff analysis

prepared for the use of the

SUBCOMMITTEE ON

EDUCATION AND HEALTH

of the

JOINT ECONOMIC COMMITTEE

December 14, 1988

A COST-BENEFIT ANALYSIS OF GOVERNMENT INVESTMENT IN POST-SECONDARY EDUCATION UNDER THE WORLD WAR II GI BILL

EXECUTIVE SUMMARY

Following the end of World War II, the Federal government provided $14 billion in education and job training benefits for 7.8 million veterans under the Servicemens' Readjustment Act or, as it was popularly known, the GI Bill of Rights.[1]

This study is a cost-benefit analysis of the portion of that total – an estimated $7 billion – that was invested in the 2.2 million GI's who used the funds to attend college or graduate school.

Based on an estimate of the increase in the nation's total output of goods and services produced by GI bill beneficiaries, this analysis found that the ratio of benefits to costs for the government's investment in education under the GI bill was a minimum of 5 to 1 and as high as 12.5 to 1 – that is, for every dollar the government invested in education under the GI bill, the nation received at least $5 of benefits and as much as $12.50 of benefits. These are extraordinarily high ratios of benefits to costs, far above the returns earned by most other forms of investment, either government or private.

Furthermore, the additional taxes paid by these college-educated veterans during their working lives more than paid for the cost of the program.

Whether or not government investment in post-secondary education today would have precisely the same ratio of benefits to costs as resulted from the investment made under the GI bill is a question that requires further research.

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[1] Library of Congress, Congressional Research Service. "Veterans' Education Assistance Programs," Report #86-32 EPW, January 31, 1986, pp. 10, 24.

During the past 35 years, a number of changes have occurred in the economy that would affect the cost-benefit ratio for post-secondary education.

On the one hand, the percent of Americans who have college educations has risen significantly. Taken alone, this would reduce the potential benefits of policies and programs that further increase the supply of college-trained workers. On the other hand, the pace of technological change and the skill requirements of new jobs have risen significantly when compared to the end of World War II, a factor that would raise the expected benefits from an expanded government investment in college education.

Altogether, the extraordinarily high ratio of benefits to costs that this analysis found for the GI bill program suggests that post-secondary education has been, and probably remains, a highly productive form of government investment for the nation.

INTRODUCTION

During World War II, Congress enacted a number of laws designed to assist the transition of veterans back to civilian life. Among the most important of these was the Servicemens' Readjustment Act of 1944 (P.L. 78-346), better known as the GI Bill of Rights. The GI bill provided a number of benefits to returning veterans, including education and job training at government expense, guaranteed loans for the purchase of homes and businesses and readjustment allowances for the unemployed. The education and training assistance constituted the largest single readjustment benefit for veterans both in terms of the amount of money spent and the number of participating veterans.[2]

According to a recent study of veterans' education assistance programs by the Congressional Research Service,

> Education assistance was one element of a whole new system of benefits – known as "readjustment benefits" – created for World War II veterans by a series of laws enacted between 1940 and 1944. The purpose of the new readjustment benefits was to help veterans, even those who were not disabled or poor, to make a successful transition back to civilian life, and to make up for educational, business or other opportunities lost while in service.[3]

Under the GI bill, the Federal government provided education or job training benefits to 7.8 million returning veterans. Just over half of all World War II veterans participated in this program, including 2.2 million who attended college or graduate school, 3.5 million who received educational training below the college level, and 2.1 million who received on-the-job or farm training. These figures are presented in Table I.

The total cost of the education and job training provided World War II veterans under the GI bill was $14 billion. There are no government data that indicate how much was spent on each type of education and training. The annual amount of educational benefits that each veteran could receive under the GI bill, however, suggests that approximately $7 billion, or about half of this total, was invested in the 2.2 million GI's who used the funds to attend college or graduate school, with the remaining $7 billion being used for the other programs.

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[2] Congressional Research Service, op. cit., p. 2.

[3] Congressional Research Service, op. cit., p. 1.

The purpose of this analysis is to determine whether the nation benefited from the investment made in college educations for veterans under the GI bill and, if so, by how much. The Committee believes that such an analysis is timely because most World War II veterans have recently reached the end of their normal working lives and are retired or about to retire. It is now possible, based on data that has been collected during the past 35 years, to make a reasonable estimate of the economic benefits resulting from the GI bill.

Table I

PARTICIPATION RATE IN GI BILL
EDUCATION & TRAINING PROGRAMS
(June 1944 - End of program)

	Number of veterans	Percent of eligible
Veteran population	15,440,000	100.0%
Total trained	7,800,000	50.5%
School trainees of which:	5,710,000	37.0%
College	2,230,000	14.4%
Other schools	3,480,000	22.5%
On-job trainees	1,400,000	9.1%
Farm trainees	690,000	4.5%

Source: Library of Congress

This analysis attempts to answer two questions:

1) How much did the nation's total output of goods and services increase between 1952 and 1987 as a result of the government's investment in college education for World War II veterans under the GI bill, compared to what the nation's output would have been if these veterans had not gone to college? How much in additional taxes did these veterans pay to the Federal government?

2) What is the benefit-cost ratio for the government's investment under the GI bill, using appropriate discount techniques?

INCREASED OUTPUT OF GOODS AND SERVICES

This section provides an estimate of the increase in the nation's total output of goods and services that could be attributed to the government's investment in the college education of World War II veterans under the GI bill. The period chosen for study is the 35 years between 1952 and 1987, which encompasses the working lives of most World War II veterans.

Although a handful of veterans were enrolled in college under the GI bill by as early as 1945, the peak years for college enrollment were 1947 to 1950. Most beneficiaries had completed their education by 1952. The number fell rapidly after that, even though a small handful of veterans received college benefits into the early 1960's.[4] This analysis assumes that most GI bill beneficiaries were in the labor force and at work by 1952.

By 1987, the end of the study period, most World War II veterans had reached the end of their normal working lives and were retired or about to retire. The data collected over the past 35 years should thus reflect most of the output of goods and services produced during the working lives of World War II veterans.

Although 2.2 million veterans received a college or graduate education under the GI bill, not all were employed or productive during the entire 35 year period because of deaths, retirements, and unemployment. As Figure 1 shows, all three factors contributed to a steady decline in the estimated number of GI bill beneficiaries employed each year. Death took the biggest toll, with less than 70 percent of veterans still alive today. The big drop in labor force participation at the end

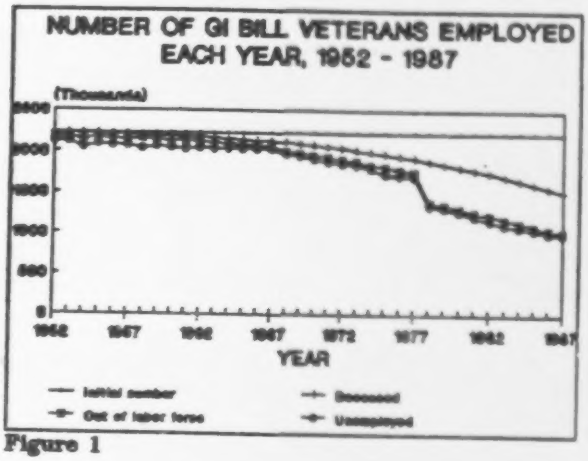

Figure 1

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[4] Veterans Administration, Office of Information Management and Statistics. "Historical Data on the Usage of Educational Benefits, 1944 - 1983." IB 70-84-2, April 1984, p. 2.

of the 1970's reflects the fact that most veterans were by that time in the 55-64 year old cohort, when the labor force parti-cipation rate for men begins to decline.

There is no data available to make a direct calculation of the added output produced by the World War II veterans who attended college or graduate school under the GI bill. For this reason, this analysis develops an indirect estimate of the additional output by calculating the income differential between GI bill college educated veterans and others in the same age cohort who did not go to college. This income differential measures the additional output generated by the GI bill investment in education.[5]

Throughout the period from 1952 to 1987, college-educated men earned substantially higher incomes than did those without a college education, as shown in Figure 2. The income differential grew annually from approximately $400 in 1952 until, by 1987, college educated men of World War II age earned an average of $19,000 more per year than did those without college educations. This differential measures the additional output produced by college-educated veterans compared to those without college educations.

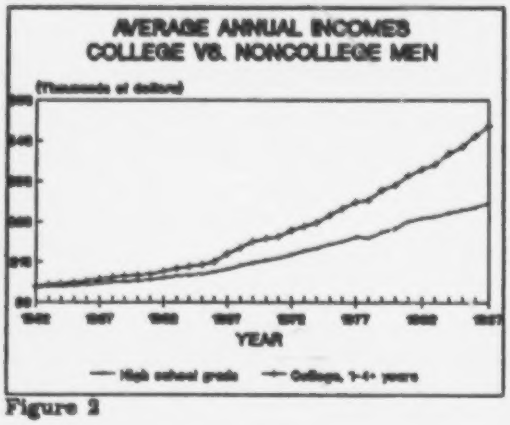

Figure 2

Based on this measure, the extra output of goods and services produced each year by GI bill veterans in nominal or current-year dollars, rises from just under $1 billion in 1952 to $10 billion by the early 1970's and to almost $19 billion by 1987, as shown in Figure 3.

---

[5] In computing the additional output attributable to the college education of GI bill veterans, a number of choices had to be made concerning the best data and procedures to use. The data and the procedures used in this study are discussed in detail in the Appendix. In every instance, however, the most conservative approach possible was taken in selecting the data for this study and the estimating procedures.

Much of the growth in the value of the nation's goods and services that occurred between 1952 and 1987, however, was the result of inflation. Only the real gain, after eliminating inflation, should be counted as a benefit of the GI bill's investment in education. The gain in constant 1952 dollars, also shown in Figure 3, grew from $1 billion in 1952 to a peak of $7 billion in 1969 and declined gradually thereafter, largely due to the decline in the number of working veterans as the World War II cohort grew older.

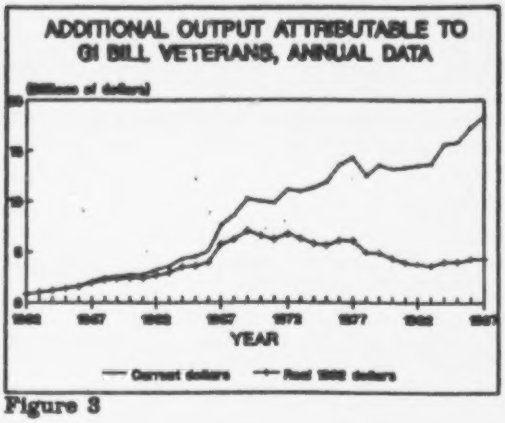

Figure 3

The total gain in the nation's output of goods and services between 1952 and 1987 resulting from the government's education spending under the GI bill – the sum of the annual figures – amounted to almost $312 billion in current-year dollars, as shown in Figure 4A. In constant 1952 dollars, the total gain amounted to almost $148 billion.

Although all GI bill veterans contributed to this increase in output, it is likely that at least some of the veterans who attended college or graduate school under the GI bill would have done so even without federal assistance. Counting the added output from these veterans overstates the actual gain resulting from the educational investment under the GI bill, since the benefits from the investment in their education would have occurred anyway.

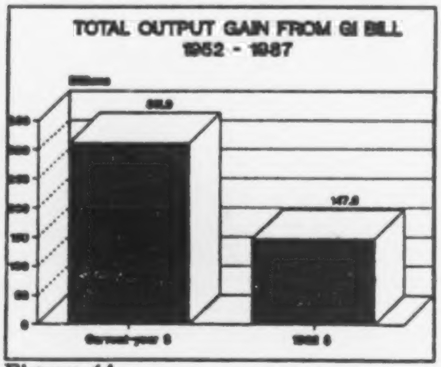

Figure 4A

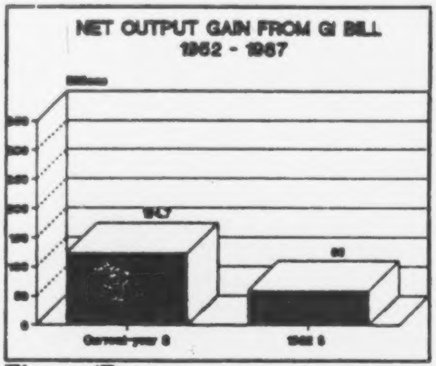

Figure 4B

There is no data to determine what fraction of the bill's beneficiaries would have attended college or graduate school had they been dependent on their own resources. In 1940, the last normal year prior to enactment of the GI bill, 9 percent of all college-age men attended college. Following World War II, 15 percent of eligible veterans attended college or graduate school under the GI bill. This suggests that 40 percent of the GI bill beneficiaries who pursued higher education did so because of the bill's financial assistance and would not have gone to college without it. Thus, this analysis will assume that 40 percent of the added output from the GI bill beneficiaries is the net gain from the bill.[6]

This net increase in output, shown in Figure 4B, was approximately $125 billion when measured in nominal or current-year dollars and $59 billion in constant 1952 dollars.

There was also a significant return to the government itself, in the form of additional taxes paid to the federal government between 1952 and 1987 by the veterans who received college educations under the GI bill. The total additional taxes paid by all GI bill veterans came to $67.7 billion in current-year dollars over this period and to $33.0 billion in constant 1952 dollars, as shown in Figure 5A. The net

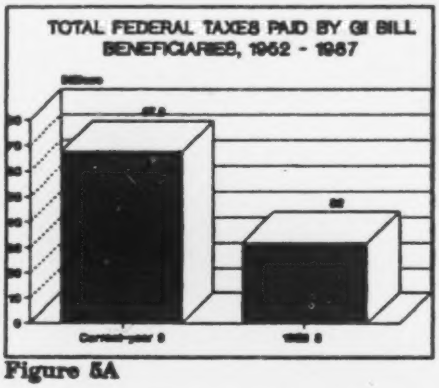

Figure 5A

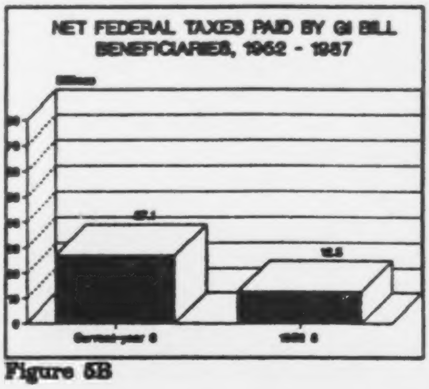

Figure 5B

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[6] This figure, however, probably represents the minimum gain from the bill, since many of the returning veterans were above the normal age for pursuing a college degree and many had wives and children. Without financial assistance, a large fraction of these veterans would probably have been compelled to find jobs. The data does not exist to determine how many veterans fell into these categories, and no adjustment will be made.

additional taxes amounted to $27.0 billion in current-year dollars and $12.8 billion in 1952 dollars, as shown in Figure 5B. All four measures indicate that GI bill veterans paid more than enough additional taxes over their working lives to pay for the total cost of the program.

BENEFIT-COST ANALYSIS

As the previous section indicates, the investment in the education of World War II veterans during the late 1940's and early 1950's paid off during the next 35 years in the form of a higher output of goods and services for the nation, with this additional output generating enough additional taxes to pay for the program.

It would not be entirely accurate, however, to compute the cost-benefit ratio for this investment by simply adding up the increased output as was done in the previous section and comparing the total to the program's cost. Such a procedure puts an equal value on an additional dollar of output regardless of when it gets produced. However, from the viewpoint of the late 1940's and early 1950's, a dollar of extra output produced far in the future would not be valued as highly as current production. To get a true valuation of the benefits of the GI bill from the vantage point of the late 1940's and early 1950's, the future benefits would have to be discounted by the long-term discount rate to determine the present value of the stream of future benefits in 1952. This analysis follows the accepted practice of calculating the present value of the benefits of the GI bill as of 1952 by discounting future benefits using a long-term real interest rate of 2.5 percent.[7]

Assuming that the benefit of the program is the entire additional output generated between 1952 and 1987 by all veterans who received college educations under the GI bill, the 1952 present value of the total benefits of the program came to $88.9 billion. This figure is then compared to the $7 billion cost of the program to compute the cost-benefit ratio. The ratio of benefits to costs is 12.5 to 1, as shown in Figure 6. For every dollar invested in college or graduate education for veterans after World War II, the nation gained more than $12.50 in benefits, properly discounted.

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[7] In calculating the benefits of the GI Bill, this study only measures material benefits, the additional output resulting from the education of GI Bill veterans. Non-material benefits, such as those resulting from having a more-educated population, would be in addition to the material benefits found by this study and would probably greatly raise the benefit-cost ratios reported here.

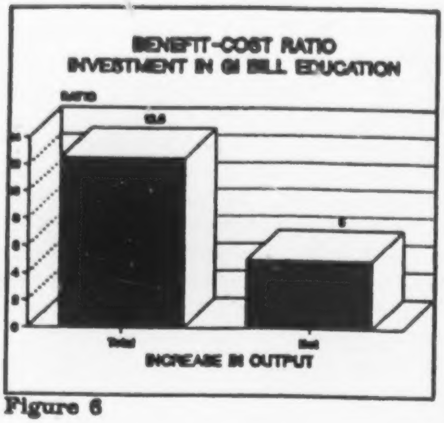

Figure 6

Under the assumption that the benefit of the program is only the additional output generated by the 40 percent of veterans who presumably would not have gone to college without the financial assistance provided by the GI bill, the 1952 present value of the net benefit came to $35.6 billion. In this case, the ratio of benefits to costs is exactly 5 to 1.

An alternative way to approach the comparison between benefits and costs is to ask how much money the government would have had to invest right after World War II at a long-term real interest rate of 2.5 percent to generate the same additional output as was generated by the $7 billion investment in college and graduate education for veterans under the GI bill.

As Figure 7 shows, the government would have had to invest $88.9 billion at a real interest rate of 2.5 percent to obtain the same total increase in output as could be attributed to the GI bill, compared to an actual investment of $7 billion. To obtain the same net increase, assuming 40 percent of veterans could not have gone to college without the GI bill, would have cost the government $35.6 billion, five times the actual investment.

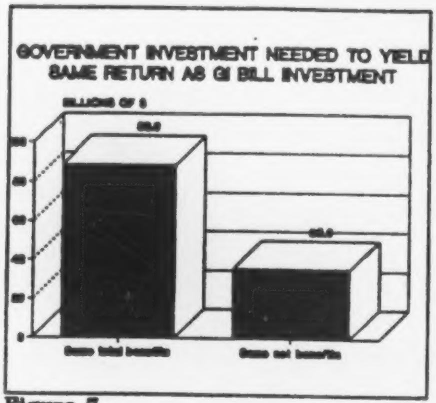

Figure 7

CONCLUSIONS

The government's investment in the education of veterans at the end of World War II had an extraordinarily large payoff for the nation.

For most forms of government investment, a project may be undertaken only if the benefits exceed the costs; that is, the ratio of benefits to costs must exceed 1 to 1. As this analysis has shown, the government's investment in education under the GI bill had an estimated ratio of benefits to costs of a minimum of 5 to 1 and as much as 12.5 to 1. If intangible benefits were taken into account, the ratio would probably be significantly higher. In addition, the additional federal income taxes paid by those who benefited from the GI bill apparently more than paid for the program.

Whether or not government investment in college education today would have precisely the same ratio of benefits to costs as resulted from the investment made under the GI bill is a question that requires further research. During the past 35 years, a number of changes have occurred in the economy that would affect the cost-benefit ratio for college education. On the one hand, the percent of Americans who have college educations has risen significantly. Taken alone, this would reduce the potential benefits of policies and programs that further increase the supply of college-trained workers. On the other hand, the pace of technological change and the skill requirements of new jobs have risen significantly when compared to the end of World War II, a factor that would raise the expected benefits from an expanded government investment in college education. Altogether, the extraordinarily high ratio of benefits to costs that this analysis found for the GI bill program suggests that college education has been, and probably remains, a highly productive form of government investment for the nation.

APPENDIX

INTRODUCTION

The purpose of this appendix is to provide details on the data and procedures used to compute the cost-benefit ratio for the government's investment in the postsecondary education of veterans under the World War II GI bill.

There is very little data that applies directly to the economic contribution of college-educated World War II veterans. Instead, almost all of the data used to compute the benefit-cost ratio had to be derived from published data that applied to populations incorporating World War II veterans but also incorporating other groups, such as men of the same age who were not veterans or who did not participate in postsecondary education or training programs under the GI bill.

In every case, however, this analysis took the most conservative approach available in selecting the necessary data where alternatives existed, under the assumption that it was better to understate the benefits than to open the analysis to criticism by using data or procedures that would overstate the possible benefits.

There were two main problems that had to be resolved. The first was to obtain data that could be used to estimate the number of GI bill beneficiaries who were actually working during each year of the study period. The second was to estimate the additional output produced by each of these veterans that could be attributed to the education they obtained under the GI bill.

SURVIVAL AND EMPLOYMENT DATA

Because 1952 was the last year in which a large number of veterans were enrolled in college under the GI bill, it was assumed for this analysis that most of those who participated in the college program had finished their studies and entered the labor market by 1952. It is likely that many veterans, particularly those who started college in 1946 or 1947, entered the labor market even earlier, while some entered later. 1952 thus represents a reasonable starting point for the analysis of the benefits of the GI bill.

1987 was chosen as the last year for the study period for two reasons. First, it is the latest year for which data were available. Second, by 1987, most veterans were at or approaching the normal retirement age. The period from 1952 to 1987 would thus represent the normal working life for most World War II veterans and the period during which the benefits of the GI bill would be realized.

Under the assumption that most World War II veterans who participated in the program were in their early 20's at the end of the war, this analysis assumed that the average age of GI bill beneficiaries in 1952 was 29. By 1987, the average veteran would thus be 64 years old. If this assumption were wrong by one or two years, the effect on the overall cost-benefit ratio would be minor, since the real output estimates for the beginning and ending years of the period were lower than for the middle years.

Out of the initial population of 2.23 million World War II veterans who attended college under the GI bill, three factors would affect the number who actually worked each year between 1952 and 1987– their survival rate, their labor force participation rate and their unemployment rate.

No government data for these factors were available that applied specifically to World War II veterans. Alternative sources of data had to be used. These data, presented in Table A1, are described below:

1. Survival rates. The National Center for Health Statistics supplied survival rates for white males who were 29 years old in 1952 at five-year intervals beginning in 1952. The intervening years were estimated by linear interpolation. These data are presented in column 3 of Table A1.

2. Labor force participation rates. Column 4 of Table A1 presents annual civilian labor force participation rates for all men of the appropriate age group: for 1952-57, men aged 25-34; for 1958-67, men aged 35-44; for 1968-77, men aged 45-54; for 1978-87, men aged 55-64. Source: Bureau of Labor Statistics, Labor Force Statistics Derived from the Current Population Survey, 1948-87. Bulletin 2307, August 1988, Table A-10.

3. Unemployment rates. Column 5 of Table A1 presents annual civilian unemployment rates for all men of the appropriate age group, listed above. Source: BLS, op.cit., Table A-31.

Finally, column 6 in Table A1 provides the computed estimate of the number of GI bill veterans who were employed or earning incomes in each year between 1952 and 1987.

TABLE A1: SURVIVAL AND LABOR FORCE DATA

YEAR (1)	AGE OF BENEFI- CIARIES (2)	SURVIVAL RATE (3)	LABOR FORCE PARTICIP. RATE (4)	UNEMPLOYMENT RATE (5)	TOTAL EARNING INCOMES (6)
1952	29	100.0%	97.5%	2.2%	2,126,417
1953	30	99.8%	97.4%	2.2%	2,119,987
1954	31	99.6%	97.3%	4.8%	2,057,378
1955	32	99.4%	97.6%	3.3%	2,092,028
1956	33	99.2%	97.3%	3.3%	2,081,401
1957	34	99.0%	97.1%	3.3%	2,072,935
1958	35	98.7%	97.9%	5.1%	2,045,309
1959	36	98.4%	97.8%	3.7%	2,067,481
1960	37	98.2%	97.7%	3.8%	2,057,354
1961	38	97.9%	97.6%	4.6%	2,032,343
1962	39	97.6%	97.6%	3.6%	2,047,772
1963	40	97.2%	97.5%	3.5%	2,038,564
1964	41	96.7%	97.3%	2.9%	2,037,761
1965	42	96.3%	97.3%	2.5%	2,036,847
1966	43	95.8%	97.2%	2.0%	2,035,842
1967	44	95.4%	97.3%	1.7%	2,034,790
1968	45	94.7%	94.9%	1.6%	1,971,625
1969	46	94.0%	94.6%	1.5%	1,952,429
1970	47	93.2%	94.3%	2.4%	1,913,677
1971	48	92.5%	93.9%	3.0%	1,879,221
1972	49	91.8%	93.2%	2.6%	1,858,328
1973	50	90.7%	93.0%	2.1%	1,841,932
1974	51	89.6%	92.2%	2.4%	1,798,819
1975	52	88.6%	92.1%	4.8%	1,731,566
1976	53	87.5%	91.6%	4.0%	1,715,459
1977	54	86.4%	91.1%	3.2%	1,699,074
1978	55	84.8%	73.3%	2.8%	1,347,956
1979	56	83.3%	72.8%	2.7%	1,315,497
1980	57	81.7%	72.1%	3.4%	1,269,245
1981	58	80.2%	70.6%	3.6%	1,216,590
1982	59	78.6%	70.2%	5.5%	1,162,777
1983	60	76.5%	69.4%	6.1%	1,112,291
1984	61	74.5%	68.5%	5.0%	1,080,833
1985	62	72.4%	67.9%	4.3%	1,049,410
1986	63	70.4%	67.3%	4.3%	1,010,550
1987	64	68.3%	67.6%	3.7%	991,513

INCOME DIFFERENTIAL

A major task of the analysis was to develop data on the additional output attributable to the government's investment in veterans' education under the GI bill. There is no direct way, given available data, of measuring the increase in the output of goods and services by GI bill veterans resulting from the fact that they were more highly-educated than they would have been without the financial assistance provided by the GI bill.

Instead, this analysis estimated the additional output indirectly from income data. These estimates are based on the assumption that each factor of production in a market economy is paid the value of its marginal product. To the extent that college-educated veterans were found to have higher incomes than men of the same age without college educations, the income differential is assumed to measure the increase in output attributable to their higher level of education.

The data used to estimate the difference in income between college-educate veterans and those without college educations are presented in Table A2 for the years 1952 - 1987.

All income data were obtained from the Census Bureau's Current Population Reports, Consumer Incomes, Series P-60, various issues identified below.

The income data reported in the Series P-60 releases became progressively more detailed over the years. For each year, the data used for this analysis were the closest available measure of the total money incomes of college-educated World War II veterans and non-college educated men of the same cohort. The specific data used are as follows for each year:

1. 1956. Median income, all males, by years of school completed, from Table 20 of Series P-60, No. 25.

2. 1958 and 1961. Median income, all males 25 years and over, by years of school completed. For 1958, the data are from Table 26, Series P-60, No. 33. For 1961, the data are from Table 27, Series P-60, No. 39.

3. 1963 - 1966. Median income, all males aged 35 - 44 years old, by years of school completed. For 1963, the data are from Table 22, Series P-60, No. 43. For 1964 - 1966, the data are from Table 21, Series P-60, Nos. 47, 51, and 53.

4. 1967. Mean income, all males aged 35 - 44 years old, by years of school completed. The data are from Table 4, Series P-60, No. 60.

TABLE A2: INCOME DATA

YEAR (1)	AGE OF BENEFI-CIARIES (2)	MEAN INCOME HIGH SCHOOL GRADUATES (3)	MEAN INCOME 1 - 4+ YEARS OF COLLEGE (4)	COLLEGE INCOME DIFFERENTIAL (5)
1952	29	$3,600	$4,000	$400
1953	30	3,800	4,300	500
1954	31	4,000	4,600	600
1955	32	4,200	4,900	700
1956	33	4,413	5,218	805
1957	34	4,703	5,723	1,021
1958	35	4,992	6,228	1,236
1959	36	5,179	6,470	1,291
1960	37	5,365	6,712	1,347
1961	38	5,552	6,954	1,402
1962	39	6,043	7,630	1,587
1963	40	6,534	8,305	1,771
1964	41	6,716	8,859	2,143
1965	42	7,040	9,283	2,243
1966	43	7,521	10,062	2,541
1967	44	8,197	11,980	3,783
1968	45	9,106	13,488	4,382
1969	46	9,729	14,995	5,266
1970	47	10,410	15,678	5,268
1971	48	10,967	16,262	5,295
1972	49	11,774	17,831	6,057
1973	50	12,707	18,733	6,026
1974	51	13,346	19,745	6,399
1975	52	14,486	21,479	6,993
1976	53	15,133	23,213	8,080
1977	54	16,235	24,818	8,583
1978	55	15,976	25,399	9,423
1979	56	17,448	27,926	10,478
1980	57	18,355	29,029	10,674
1981	58	20,139	31,439	11,300
1982	59	20,964	33,039	12,075
1983	60	21,401	34,084	12,683
1984	61	22,244	36,983	14,739
1985	62	23,027	38,455	15,428
1986	63	23,564	41,092	17,528
1987	64	24,692	43,692	19,000

5. 1968 - 1977. Mean income, all males aged 45 - 54 years old, by years of school completed. For 1972, the data are from Table 51, Series P-60, No. 90. For 1973 and 1974, the data are from Table 58, Series P-60, Nos. 97 and 101. For 1975, 1976, and 1977, the data are from Table 47, Series P-60, Nos. 105, 114 and 118. For 1968 through 1971, the data were supplied by phone by the Census Bureau.

6. 1978 - 1986. Mean income, all males aged 55 - 64 years old, by years of school completed. For 1978, the data are from Table 50, Series P-60, No. 123. For 1979, the data are from Table 52, Series P-60, No. 129. For 1980, the data are from Table 51, Series P-60, No. 132. For 1981, 1982 and 1983, the data are from Table 47, Series P-60, Nos. 137, 142 and 146. For 1984, the data are from Table 33, Series P-60, No. 151. For 1985 and 1986, the data are from Table 35, Series P-60, Nos. 156 and 159.

7. Other years. In 1952-55, 1957, 1959-60, and 1962, the Census Bureau did not publish data on income by educational level. For these years, the data were estimated by interpolating or extrapolating from data for other years. At the time this analysis was prepared, the final data for 1987 had not been released and the figures were also estimated.

For all years, the measure of income used for college-educated men was the income for all men who had attended college for 1 to 4 or more years. For those without a college education, the income measure was the income for all men who had graduated from high school. This assumes that GI bill veterans did not all complete four years of college, but that the proportion who completed 1, 2, 3, 4 or more years was the same as for all men in the same cohort. This income comparison is shown in Figure 1 of the text of the analysis and in Table A2. These choices resulted in the minimum income differential between those with and without college educations. If some other comparison were used, such as (1) the mean income of men with 1-4+ years of college versus men with 1-4 years of high school or (2) college graduates versus high school graduates, the earnings differential between college and non-college educated men would be about one-third larger than reported here as would the resulting cost-benefit ratios.

TOTAL BENEFITS

The additional income received each year by GI bill beneficiaries is presented in column 2 of Table A3. The figure for each year is the product of the number of working veterans (column 6 of Table A1) and the additional income earned by each college-educated veteran (column 5 of Table A2). These figures are in nominal or current-year dollars.

TABLE A3: TOTAL BENEFITS DATA

	TOTAL INCOME DIFFERENTIAL ATTRIBUTABLE TO GI BILL	
YEAR	(Current dollars)	(1952 dollars)
(1)	(2)	(3)
1952	$850,566,600	$850,566,600
1953	$1,059,993,544	$1,038,062,644
1954	$1,234,426,512	$1,204,732,403
1955	$1,464,419,756	$1,409,814,274
1956	$1,675,528,155	$1,580,896,997
1957	$2,115,430,544	$1,938,007,337
1958	$2,528,001,834	$2,272,001,648
1959	$2,669,807,641	$2,347,446,966
1960	$2,770,570,202	$2,391,616,830
1961	$2,849,344,952	$2,430,071,971
1962	$3,248,789,768	$2,721,699,983
1963	$3,610,296,409	$2,980,593,547
1964	$4,366,921,571	$3,543,444,932
1965	$4,568,647,746	$3,644,651,573
1966	$5,173,073,795	$4,003,141,574
1967	$7,697,610,592	$5,814,152,681
1968	$8,639,662,875	$6,243,420,500
1969	$10,281,490,837	$7,121,813,165
1970	$10,081,250,461	$6,673,834,804
1971	$9,950,474,203	$6,293,841,144
1972	$11,255,893,808	$6,845,125,999
1973	$11,099,481,005	$6,355,347,995
1974	$11,510,642,343	$5,965,369,390
1975	$12,108,841,033	$5,808,971,036
1976	$13,860,908,764	$6,288,335,605
1977	$14,583,153,675	$6,209,318,806
1978	$12,701,790,741	$5,038,140,462
1979	$13,783,775,570	$5,005,872,458
1980	$13,547,925,837	$4,442,968,750
1981	$13,747,469,031	$4,127,147,151
1982	$14,040,528,945	$3,987,510,220
1983	$14,107,185,469	$3,848,646,180
1984	$15,930,401,684	$4,185,230,415
1985	$16,190,293,649	$4,120,110,570
1986	$17,712,915,890	$4,401,109,460
1987	$18,838,752,945	$4,477,159,696
TOTAL	$311,856,268,388	$147,610,175,766

To exclude the income growth that occurred solely as the result of inflation, the annual figures in column 2 were deflated to 1962 dollars using the Personal Consumption Deflator from the National Income and Product Accounts. The resulting real gains are presented in column 3 of Table A3.

In addition to factors discussed above, the figures in Table A3 should probably be interpreted as the minimum annual gains from the government's GI bill education spending, for two reasons. First, to the extent that the value of marginal product curve for each resource is downward-sloping, the shift of 2.2 million men from the non-college to college-educated labor pool would reduce the market wage for college-educated men and raise the market wage for those without college educations, everything else being equal. Second, it is likely that the investment in education of World War II veterans had spillover effects that raised the productivity even of workers who never attended college, thus raising their wages as well. Both effects would boost the observed wages of non-college educated men relative to college educated men, and thus understate the income differential resulting from the investment in education made under the GI bill.

This analysis also derived estimates of the additional personal income taxes paid to the Federal government out of the additional income received by veterans who obtained postsecondary educations under the GI bill. These figures are presented in Table A4. In computing the additional taxes, it was assumed that all of the additional income received by college-educated veterans was taxable, since this was a net income gain above what they would have earned with only a high-school education. Rather than estimate marginal tax rates for each year based on arbitrary assumptions concerning exemptions, deductions and exclusions, it was decided to simply apply average tax rates for each year since the average rate should be below the marginal rate. The average rates were obtained from Joseph Pechman, Federal Tax Policy, Fifth Edition (Brookings Institution, 1987), Table B-5, "Personal Income, Taxable Income and Individual Income Tax, 1947-84," with the 1984 tax rate assumed to apply to 1985-87. No attempt was made to estimate other taxes paid the Federal government or taxes paid State and local governments.

The figures for the net additional income and federal taxes were obtained by multiplying the data in Tables A3 and A4 by a factor of 0.4, for reasons discussed in the text of the analysis.

COST-BENEFIT ANALYSIS

For the benefit-cost analysis, the only major data decision concerned the appropriate discount rate. It was decided to use 2.5 percent, which is at the high end

TABLE A4: FEDERAL INCOME TAX DATA

YEAR	PCT. OF TAXABLE INCOME	TOTAL FEDERAL INCOME TAXES ATTRIBUTABLE TO GI BILL (Current dollars)	TOTAL FEDERAL INCOME TAXES ATTRIBUTABLE TO GI BILL (1952 dollars)
(1)	(2)	(3)	(4)
1952	25.9%	$220,296,749	$220,296,749
1953	25.7%	$272,418,341	$266,782,099
1954	23.2%	$286,386,951	$279,497,918
1955	23.1%	$338,280,964	$325,667,097
1956	23.1%	$387,047,004	$365,187,206
1957	23.0%	$486,549,025	$445,741,688
1958	23.0%	$581,440,422	$522,560,379
1959	23.2%	$619,395,373	$544,607,696
1960	23.0%	$637,231,146	$550,071,871
1961	23.2%	$661,048,029	$563,776,697
1962	23.0%	$747,221,647	$625,990,996
1963	23.1%	$833,978,471	$688,517,109
1964	20.5%	$895,218,922	$726,406,211
1965	19.4%	$886,317,663	$707,062,405
1966	19.6%	$1,013,922,464	$784,615,749
1967	20.0%	$1,539,522,118	$1,162,830,536
1968	21.7%	$1,874,806,844	$1,354,822,249
1969	22.3%	$2,292,772,457	$1,588,164,336
1970	20.9%	$2,106,981,346	$1,394,831,474
1971	20.6%	$2,049,797,686	$1,296,531,276
1972	20.9%	$2,352,481,806	$1,430,631,334
1973	21.1%	$2,341,990,492	$1,340,978,427
1974	21.6%	$2,486,298,746	$1,288,519,788
1975	20.9%	$2,530,747,776	$1,214,074,947
1976	21.0%	$2,910,790,840	$1,320,550,477
1977	21.8%	$3,179,127,501	$1,353,631,500
1978	22.3%	$2,832,499,335	$1,123,505,323
1979	23.2%	$3,197,835,932	$1,161,362,410
1980	24.0%	$3,251,502,201	$1,066,312,500
1981	24.3%	$3,340,634,974	$1,002,896,758
1982	22.6%	$3,173,159,542	$901,177,310
1983	21.1%	$2,976,616,134	$812,064,344
1984	20.9%	$3,329,453,952	$874,713,157
1985	20.9%	$3,383,771,373	$861,103,109
1986	20.9%	$3,701,999,421	$919,831,877
1987	20.9%	$3,937,299,366	$935,726,376
TOTAL		$67,656,843,012	$32,021,041,378

of the range of ex post real interest rates for the period from 1962 to 1967. This real interest rate was then used to discount the stream of benefits to a 1962 present value figure, which was then compared to the program cost to obtain the cost-benefit ratios presented in the text of the analysis.

Representative **Scheuer**. I am now delighted to introduce my colleagues for any statements they wish to make.

First, Olympia Snowe, the distinguished Representative from the State of Maine, who, incidentally, will be introducing the Governor of Maine in just a few moments.

OPENING STATEMENT OF REPRESENTATIVE SNOWE

Representative **Snowe**. Thank you, Mr. Chairman.

First of all, I want to take this opportunity to commend you for your dedication and commitment to holding a series of hearings on this very critical issue. It is obvious that a key to our Nation's strong economic future will be a well-trained and a well-educated work force. To achieve this goal, it is imperative that we examine closely all obstacles in the path of the necessary preparation.

It pleases me today to see two of our former colleagues here, the Honorable John Brademas and the Governor of the State of Maine. I think we are privileged to hear the testimony from Mr. Brademas, who is eminently well qualified to speak to a number of the issues that this subcommittee will be addressing.

I am also pleased that the Governor of the State of Maine is here because Maine has been recently recognized by the American Association of State Colleges and Universities for its effectiveness in addressing access to postsecondary education. Maine was specifically heralded for the development of a telecommunications program to reach out to rural residents, its financial commitment to higher education, and the commitment of both the Governor and the legislature, as well as the Maine ASPIRE program to involve both the business and the education community in increasing the goals and aspirations of Maine's high school students.

I think this commitment is especially important for our State as we move from an industrial and agricultural economy to an economy based on technology and services, requiring a work force with postsecondary training.

We all recognize how difficult it is. Many of our students in the State of Maine are denied access because of cost. Even with public institutions, the average cost is now approximately $4,000. So clearly the scope of this discussion and hearing is to analyze financial assistance, including savings plans.

On the other end of the educational spectrum, we recognize the difficulty in developing preschool education for many of the at-risk population. We know the first 5 years of education are so important to our youngsters and to the future of this country. So often it is the low-income students who are denied this access.

I commend you, Mr. Chairman, for focusing entirely on these subjects and more in your hearings and also in the subcommittee report which was released today.

Thank you.

Representative **Scheuer**. Thank you very much, Congresswoman Snowe. We are delighted to have you here with us.

Now for the star of these proceedings, the chairman of the Postsecondary Education Subcommittee, Congressman Pat Williams of Montana.

OPENING STATEMENT OF REPRESENTATIVE WILLIAMS

Representative **Williams**. Thank you very much, Mr. Chairman. I want to commend you for your aggressiveness in pursuing these hearings. It is particularly appropriate that the Joint Economic Committee is the sponsor of these hearings because Americans understand that there is a direct and very real and undeniable link between America's economy and how well we educate ourselves.

I am delighted to be able to participate in most if not all of your hearings.

The Federal Government has primarily limited itself to matters of equity and access with regard to its involvement in education in the United States. You will notice I left out the word "quality." We have primarily left quality to State and local governments, and even below that, at the school district levels. It is those Americans and those levels of government in the United States that are primarily charged with delivering quality. Whatever the quality that Americans decide to deliver to the students within their jurisdictions, the Federal Government then says now that all of those students must have equal access to that quality.

Occasionally the Federal Government has to send the troops to assure that access, and has done so, as you all remember. But primarily, we assure access and equity with legislation such as Head Start or Pell grants.

Let me make this point about Pell grants. Perhaps it is not entirely inappropriate to the purpose of this hearing. My subcommittee and the full House Education Committee voted out legislation just a couple of months ago that—had it reached the floor of the House and been passed through both this body and the Senate—would have made Pell grants an entitlement.

I know the political climate in America is such today that adding another entitlement may not be considered to be following the wave of political thought. I submit that if you ask the American people whether or not all young students should have access to colleges or a university without regard to their income status, their financial condition; Americans would overwhelmingly say, but we do that now, don't we? The answer is no, we don't do that now.

One of the ways that we might assure doing it is to create yet another entitlement, this one being Pell grants.

My subcommittee is going to try again in this coming Congress to achieve exactly that. I would encourage the witnesses today, if they think of it, if it is not in their prepared statements, to comment and give us your judgment about entitling under law access and equity to higher education for all American people.

Congressman Scheuer, again I want to commend you for these hearings. I want to thank in advance each of the witnesses for the time and efforts that you spend in trying to improve education in your school district, your community, your State, and in this country as well.

Thank you very much.

Representative **Scheuer**. Thank you very much, Pat.

Before we begin, Senator D'Amato has requested that his opening statement be placed in the hearing record. Without objection, it is so ordered.

[The written opening statement follows:]

WRITTEN OPENING STATEMENT OF SENATOR D'AMATO

MR. CHAIRMAN, IT GIVES ME GREAT PLEASURE TO WELCOME SUCH A DISTINGUISHED PANEL OF WITNESSES TO TODAY'S JOINT ECONOMIC COMMITTEE HEARING. I LOOK FORWARD TO A SPIRITED EXCHANGE OF IDEAS ON HOW TO IMPROVE ACCESS TO PRESCHOOL AND POST-SECONDARY EDUCATION.

I WOULD LIKE TO COMMEND THE CHAIRMAN OF THIS SUBCOMMITTEE, MY GOOD FRIEND CONGRESSMAN SCHEUER, FOR CONVENING HEARINGS ON THIS URGENT AND TIMELY SUBJECT.

TODAY MARKS THE RELEASE OF A REPORT OUTLINING THE FINDINGS OF THIS SUBCOMMITTEE'S HEARINGS ON "COMPETITIVENESS AND QUALITY OF THE AMERICAN WORK FORCE." THE EDUCATION DEFICIT TAKES AN IN-DEPTH LOOK AT WAYS TO REVAMP OUR EDUCATION SYSTEM TO MEET THE WORKFORCE NEEDS OF THE 21ST CENTURY. AS WE KNOW, TODAY'S FIRST GRADERS WILL BE THE HIGH SCHOOL GRADUATING CLASS OF THE YEAR 2000.

A LITERATE, SKILLED WORK FORCE IS ESSENTIAL TO MAINTAINING OUR NATION'S COMPETITIVE EDGE IN AN INCREASINGLY GLOBAL MARKETPLACE. THE EDUCATION DEFICIT HIGHLIGHTS THE RECURRING THEMES HEARD FROM THE MORE THAN 50 WITNESSES AT THESE HEARINGS:

WE SHOULD CONSIDER LENGTHENING THE SCHOOL DAY, SCHOOL WEEK, AND SCHOOL YEAR.

SCHOOL BUILDINGS SHOULD BE USED FOR COMMUNITY ACTIVITIES SUCH AS ADULT LITERACY COURSES AND COUNSELING.

MORE EMPHASIS SHOULD BE PLACED ON THE SKILLS NEEDED IN THE WORK FORCE: PROBLEM-SOLVING, REASONING, THE "HIGHER ORDER" SKILLS.

VOCATIONAL EDUCATION SHOULD BE UPDATED TO MEET CURRENT AND PROJECTED DEMANDS.

THE ROLE OF TEACHERS MUST BE RE-EXAMINED. TEACHERS MUST BE WELL-PAID AND INVOLVED IN MORE DECISION-MAKING.

WE MUST FOCUS ON RETRAINING THE CURRENT WORK FORCE AND UPGRADING SKILLS.

WE MUST NOT OVERLOOK THE CHANGING CHARACTERISTICS OF TOMORROW'S LABOR MARKET. AS THE SUPPLY OF YOUNG WORKERS SHRINKS, THE MAJORITY OF JOBS WILL REQUIRE HIGHER LEVELS OF EDUCATION.

IN ADDITION, THE REPORT EMPHASIZES PROVIDING BROADER ACCESS TO BOTH PRESCHOOL AND POSTSECONDARY EDUCATION -- THE THEME OF TODAY'S HEARING.

QUALITY PRESCHOOL PROGRAMS ARE PARTICULARLY VITAL FOR DISADVANTAGED CHILDREN. THESE CHILDREN, OFTEN LABELED "AT-RISK" DUE TO THE STRESSES ASSOCIATED WITH POVERTY, FACE SEEMINGLY INSURMOUNTABLE OBSTACLES FROM THE START -- AND THEIR NUMBERS ARE INCREASING DRAMATICALLY. BETWEEN 1978 AND 1986 THE NUMBER OF CHILDREN LIVING IN POVERTY INCREASED FROM 16% TO 20%. DURING ROUGHLY THE SAME PERIOD, THE SHARE OF CHILDREN UNDER AGE 6 LIVING IN SINGLE PARENT HOUSEHOLDS INCREASED FROM 17% TO 22%.

OUR EXPERIENCE WITH PROGRAMS SUCH AS HEAD START AND CHAPTER 1 HAS SHOWN THAT EARLY INTERVENTION PROGRAMS CAN PROVIDE THESE "AT-RISK" KIDS WITH THE COMPETITIVE EDGE THEY NEED TO SUCCEED -- LEADING TO IMPROVED CHANCES FOR HIGH SCHOOL GRADUATION, COLLEGE ADMISSION, AND PRODUCTIVE EMPLOYMENT.

UNFORTUNATELY, THESE PROGRAMS REACH ONLY A FRACTION OF THE CHILDREN THEY ARE INTENDED TO SERVE. HEAD START, WHICH ENROLLS APPROXIMATELY 440,000 CHILDREN NATIONALLY (30,000 IN NEW YORK), CURRENTLY SERVES LESS THAN ONE OUT OF FIVE ELIGIBLE CHILDREN. AT THE SAME TIME, CHAPTER 1 SERVICES REACH ONLY ABOUT HALF OF ALL ELIGIBLE CHILDREN.

IT IS CLEAR THAT WE CAN DO A MUCH BETTER JOB OF PROVIDING EARLY EDUCATIONAL ASSISTANCE TO THOSE WHO NEED IT MOST. I AM ENCOURAGED BY THE RECENT ENACTMENT OF PROGRAMS SUCH AS EVEN START AND THE SCHOOL DROPOUT DEMONSTRATION ASSISTANCE ACT OF

1988. THESE TWO PROGRAMS -- AUTHORIZED UNDER THE HAWKINS/STAFFORD ACT -- WILL VITALLY AUGMENT OUR EFFORTS TO ASSIST THE DISADVANTAGED.

I AM ALSO ENCOURAGED BY RECENT EVIDENCE -- HIGHLIGHTED IN JIM MURPHY'S TESTIMONY -- OF GROWING CORPORATE SUPPORT OF EARLY EDUCATION PROGRAMS. THESE EFFORTS MUST BE FURTHER ENCOURAGED. WHEN COMBINED WITH A STRONG FEDERAL COMMITMENT TO HEAD START AND CHAPTER 1, THEY HOLD THE PROMISE OF VASTLY IMPROVING ACCESS TO PRESCHOOL EDUCATION FOR ALL AMERICAN CHILDREN.

SEVERAL RECENT TRENDS DEMAND THAT WE ALSO FOCUS OUR ATTENTION ON IMPROVING ACCESS TO POSTSECONDARY EDUCATION. ONE SUCH TREND IS THE GROWTH OF JOBS REQUIRING MORE SKILLS AND MORE EDUCATION. THE DEPARTMENT OF LABOR ESTIMATES THAT WELL OVER HALF OF ALL JOBS CREATED BETWEEN NOW AND THE YEAR 2000 WILL REQUIRE EDUCATION BEYOND HIGH SCHOOL.

AT THE SAME TIME, WE ARE WITNESSING AN ALARMING DECLINE IN THE ENROLLMENT OF MINORITIES IN OUR NATION'S COLLEGES. ACCORDING TO THE CENSUS BUREAU, THE PERCENTAGE OF 18-24 YEAR OLD BLACK HIGH SCHOOL GRADUATES ENROLLED IN COLLEGE HAS DECLINED 15% SINCE 1976, WHILE HISPANIC ENROLLMENT HAS DECLINED 18%. RETENTION RATES ARE ALSO ON THE DECLINE, WITH LESS THAN 20% OF MINORITY STUDENTS WHO ENTER COLLEGE REMAINING THROUGH THE FOURTH YEAR.

IF OUR ECONOMY IS TO AVOID A CRIPPLING SHORTAGE OF QUALIFIED LABOR IN THE COMING DECADES, WE MUST STRIVE TO MAKE HIGHER EDUCATION MORE ACCESSIBLE FOR ALL YOUNG PEOPLE. TO DO THIS WE MUST MAINTAIN OUR COMMITMENT TO PROVEN FINANCIAL ASSISTANCE PROGRAMS -- PARTICULARLY PELL GRANTS AND STAFFORD LOANS. WE MUST ALSO EXPLORE ALTERNATIVE METHODS OF FINANCING POSTSECONDARY EDUCATION.

I AM ESPECIALLY INTERESTED IN SUCH INNOVATIVE PROPOSALS AS CUNY'S NEHEMIAH II PROGRAM. I LOOK FORWARD TO HEARING HOW THIS PROGRAM HAS INVOLVED THE BANKING AND EDUCATIONAL COMMUNITIES IN AN EFFORT TO MOTIVATE DISADVANTAGED SCHOOL-AGE YOUTH THROUGH THE PROMISE OF A COLLEGE EDUCATION. IN ADDITION, I HOPE TO LEARN HOW THIS AND SIMILAR PROGRAMS MAY BE REPLICATED IN COMMUNITIES THROUGHOUT THE UNITED STATES.

DURING THESE HEARINGS, WE WILL EXPLORE WAYS TO PROVIDE APPROPRIATE EDUCATION FOR TOMORROW'S GENERATION. I LOOK FORWARD TO HEARING THE RECOMMENDATIONS OF OUR WITNESSES. INVESTING IN OUR HUMAN CAPITAL WILL REAP RICH REWARDS IN TERMS OF ECONOMIC STRENGTH AND THE ENRICHED LIVES OF OUR CITIZENS.

THANK YOU, MR. CHAIRMAN.

Representative **Scheuer**. I am now privileged to welcome our distinguished witnesses. The first witness is particularly welcome since he was a driving force in Congress for over two decades and had a hand in producing virtually every single major education bill of that era.

Former Congressman John Brademas, now president of New York University, has come to be recognized as one of the outstandingly thoughtful and creative university presidents in our country.

He served 11 terms in the House of Representatives, the last 4 as majority whip, the third ranking leadership position.

I understand from this morning's papers that they are considering giving $40,000 additional salary to members of the leadership. John, it's a shame that you couldn't have hung on.

Mr. **Brademas**. A salutary development.

Representative **Scheuer**. As a member of the Education and Labor Committee he was involved in virtually every piece of legislation that was passed from 1958 to 1980 and he was especially concerned with student aid, libraries, the handicapped, and museums.

I remember working with him long and hard over a period of many years on a substantial program for child care. It didn't happen then, John, and it hasn't really happened yet. That's a major piece of unfinished business.

We couldn't be more pleased to have this protean figure with us this morning, with his vast experience on both private sector education leadership and the legislative education leadership. We are delighted to have you. Please take such time as you may need.

STATEMENT OF HON. JOHN BRADEMAS, PRESIDENT, NEW YORK UNIVERSITY

Mr. **Brademas**. Thank you very much, Mr. Chairman and members of the subcommittee. Let me ask unanimous consent that my prepared statement be printed in the record.

Representative **Scheuer**. Without objection, it is so ordered.

Mr. **Brademas**. Thank you very much, Mr. Chairman, for your very generous remarks.

I want to congratulate you, my old and valued friend and colleague, long an imaginative and creative legislator, now representing the State and city where I live, as well to salute my other former colleagues, Congressman Pat Williams, who ably chairs the subcommittee on which I served all my years in the House of Representatives, and my friend Olympia Snowe, who shares with me a Hellenic ancestry and therefore a deep commitment to education.

I am honored to appear before you and with such distinguished witnesses as will be following.

It is, of course, a particular pleasure for me to be here because, as you know, I served as a Member of Congress for 22 years. I regard that service as one of the most gratifying periods of my life, and I continue to take great pride in having made some contribution during that time to shaping the policies of our National Government in support of education, the arts and other areas of American life.

For over 7½ years, I have had the privilege of serving as president of New York University, one of the foremost urban universities in the Nation. With some 47,000 students in 14 schools, colleges and divisions and an annual operating budget of $900 million, it is the largest private university in the world. I must tell you that as a result of my experience on the campus, I am even more convinced of the wisdom of the judgments that you and my other colleagues in Congress and I made over the last generation in forging policies to assist the colleges and universities of our country and the students who attend them.

You will also not be surprised to learn that I have not lost my concern about questions of public policy. I have sat on special task forces and study groups that have investigated a range of issues—currently, for example, the National Commission on the Public Service, chaired by Paul Volcker; the Carnegie Commission on Science, Technology and Government; and the Consultant Panel to the Comptroller General of the United States.

Moreover—something I could not do as a Member of Congress—I now also sit on several corporate and foundation boards, including Governor Cuomo's New York State Council on Fiscal and Economic Priorities, which I chair.

So I come before you today as one who wears several hats: that of a former Member of Congress; president of a major private university; and one who now devotes some attention to matters of public policy.

You have asked me to testify on national programs for education, particularly higher education, and the relationship between an investment in education and the country's future. Let me begin by discussing the changing role of the Federal Government in education and the pattern of commitments made by past Presidents and Congresses.

For as we meet at the close of 1988 and prepare for the swearing in of a new President and a new Congress, we should keep in mind that the current structure of Federal contribution to our schools, colleges, and universities represents the deliberate and thoughtful work over the past three decades of both chief executives and legislators.

Then I want to outline some of the major challenges facing the country that higher education can help meet.

I want to also comment on policies of the departing national administration, and speak particularly of the ongoing issue of assuring access to higher education. Then I want to weigh the prospects for improvement with a new President and Congress.

I shall conclude by making a bold outline of an agenda for consideration by President Bush and the 101st Congress to ensure that America's colleges and universities are prepared for the Nation's needs of the 21st century.

THE FEDERAL ROLE IN EDUCATION

As you all know, the National Government has been involved in education in one way or another for a century and a half with Federal initiatives adapting to the changing demands of an expanding society. The benchmarks of that evolution are well-known:

As early as 1787, Congress, through the Northwest Ordinance, reserved land for public schools.

Nearly a century later, the Morrill Act made possible the establishment of land-grant colleges and universities.

The GI bill of World War II, one of the most sweeping Federal aid programs for education ever enacted, afforded millions of returning veterans, including me, the means to go to college.

The National Defense Education Act of 1958 provided Federal funds for improving the teaching of mathematics, science, and foreign languages.

Each era has produced its own stimulus and rationale for the use of Federal tax dollars to help education. The movement toward land-grant colleges in the 1860's took place in the context of America's entrance into the industrial age and the necessity to prepare students in the sciences, mechanical arts, agricultural, and other skills essential to that time. The GI bill arose from a sense of national obligation to our returning soldiers.

In 1958 the justification for an expanded Federal role in education came with the Soviet launching of Sputnik. With the passage of the National Defense Education Act, a new Federal purpose in education was articulated:

> The national interest requires * * * that the Federal Government give assistance to education for programs which are important to our national defense.

I entered Congress the year following enactment of the NDEA, sought and won assignment to the Committee on Education and Labor, and remained on the committee throughout my service in Congress.

Federal activities in education expanded significantly during that time, and I took part in the process.

FOUR COMMITMENTS

Here briefly, during my years in Congress, is what we in Washington sought to accomplish.

First, we made—and when I say "we," I include Presidents, Senators, and Representatives of both parties—a commitment that education be accessible to those likely to be excluded.

Obviously, I cite here the Elementary and Secondary Education Act of 1965 which for the first time provided substantial Federal funds to grade schools and high schools. In addition, there were Head Start, the Job Corps, the Neighborhood Youth Corps, Upward Bound, and all the other components of the War on Poverty. We also created vocational education and manpower training programs as well as a measure on which I labored long, the Education for All Handicapped Children Act.

To assure talented but needy young men and women a chance for a college education, Presidents of both parties—Eisenhower, Kennedy, Johnson, Nixon, Ford, and Carter—as well as Democrats and Republicans in Congress, put in place—from the National Defense Education Act through a series of higher education laws—a fabric of grants, loans, and work-study jobs.

We made a second commitment during my time in Washington—to assist our institutions of culture. The milestones on this path included the National Endowment for the Arts and Humanities as well as programs to help public libraries and museums—all measures that I championed.

There was a third commitment—to strengthen international studies at our colleges and universities. Here I cite the International Education Act of 1966 and other efforts to encourage teaching and learning about the peoples and cultures of the rest of the world.

A fourth commitment was to research. Support from the National Government has been crucial in enhancing our understanding of ourselves and our universe through, among other entities, the National Science Foundation, the National Institutes of Health, and the National Institute of Education.

These then were the four commitments when I was on Capitol Hill that guided and informed our actions as lawmakers for education.

SCHOLARSHIP AND NATIONAL CHALLENGES

In the years since I left Washington, DC, for Washington Square, there has appeared a flood of studies and reports that have underscored the close connection between education and the country's future.

There is rising recognition on the part of the people of the United States that what we as a nation do—or fail to do—to support education will in large part determine America's well-being till the end of this century and into the next one.

Here I note that last year I served on the Commission on National Challenges in Higher Education, sponsored by the American Council on Education and chaired by William Friday, president-emeritus of the University of North Carolina. I know that Robert Atwell, the president of ACE, will be testifying before this subcommittee tomorrow. Last December, the 33-member commission, composed of college and university presidents and business and labor leaders, issued a "Memorandum to the 41st President of the United States."

Our commission urged the next President to place the problems and perspectives of higher education in the context of the formidable challenges confronting the Nation.

My colleagues and I spoke of five challenges that we believe the United States will face and that our colleges and universities can help our newly elected leaders meet.

As I enumerate the challenges highlighted by the ACE Commission, I shall also mention some other studies before and since that reinforce our findings.

STRENGTHENING INTERNATIONAL EDUCATION

First, our commission said, we must educate Americans for an increasingly interdependent world. To conduct effective foreign, economic, and defense policies, the 41st President and the new Congress must turn for knowledge and expertise to our institutions of higher learning.

Indeed, the people of the United States, in whose hands, for better or worse, lies much of the responsibility for building a peaceful and stable world, must do a far better job than they have been doing of learning about other cultures, countries, and languages.

In 1979, a Commission on Foreign Language and International Studies, appointed by Presdient Carter, described our "scandalous incompetence" in the United States in foreign languages and declared itself "profoundly alarmed" by its inquiry.

Nearly a decade after the 1979 report, the news is not much better. In a poll conducted last summer by the National Geographic Society of 11,000 people in nine countries about their knowledge of basic facts of geography and world affairs, Americans ranked in the bottom third.

Some of the disheartening findings:

Half the adult Americans could not identify Nicaragua as the country where the Contras and Sandinistas are fighting;

More than half could not find Japan on a map; and

A third of the Americans polled could not name a single member of NATO.

REVITALIZING THE AMERICAN ECONOMY

A second challenge for the new President, our commission said, is that in an increasingly competitive world, we must revitalize the American economy. A critical determinant of our economic health in the remainder of this century and beyond will be our colleges and universities. As major sources of discovery, innovation, and invention, they can contribute significantly to the renewal of our advanced, technology-based economy.

But the need among others for enhanced investment to upgrade and replace outmoded facilities and equipment—the laboratories, libraries and classrooms that constitute the infrastructure of the academic enterprise—will require substantial public funds.

A panel of the White House Science Council, cochaired by David Packard, chairman of Hewlett-Packard and former Secretary of Defense, and Professor Allan Bromley of Yale, deplores the deterioration of facilities and obsolescence of equipment. The needs in this area are staggering—some estimates run as high as $70 billion.

Indeed, more and more voices are urging renewed attention to education, research and development as essential to restoring America's economic position in the world. Among the most prominent of those making this case are the panel of the White House Science Council I have just mentioned; the Cuomo Commission on Trade and Competitiveness; Erich Bloch, director of the National Science Foundation; both the Congressional Caucus on Competitiveness and the Council on Competitiveness; and the National Governors Association.

EXPANDING EDUCATIONAL OPPORTUNITY

A third challenge for President Bush and the Nation, according to our commission: We must expand educational opportunity. Persistent unemployment in some areas and a rapidly growing underclass require that we open the doors to learning at every level.

But a recent report from the American Council on Education and the Education Commission of the States warns of an ominous trend—a decline in minority participation in higher education at all levels. As the report says, "During the same period when the pool of minority high school graduates was becoming bigger and better than ever, minority college attendance rates fell and have remained disproportionately low."

Although enrollment of black students in American colleges and universities rose during the 1970's; between 1980 and 1984, it dropped by more than 3 percent. In like fashion, although the number of young Hispanics of college age in the United States grew by 62 percent over the past decade, the number enrolled in colleges and universities increased by only 43 percent.

Moreover, the number of black men earning doctorates fell by nearly 27 percent in the past 10 years with fewer of them studying medicine, dentistry, business, and law. During that same period, only 2.1 percent of all doctorates granted in the United States were awarded to Hispanics. In certain fields, minorities have become virtually nonexistent. For example, in all of 1986, only one black received a doctorate in computer science.

IMPROVING THE QUALITY OF LIFE

Fourth, our ACE Commission said, we must address human needs and the quality of life. Although there is no single set of remedies for such tough problems as poverty, homelessness, environmental pollution, and poor health care, finding solutions requires new knowledge and research.

Unfortunately, as public officials have increased the proportion of Federal research funds for defense—military research now accounts for two-thirds of Federal R&D funds—they have scaled back support of social science research directed at such problems as housing, unemployment, adult literacy, and poverty. In consequence, we know much less today than we should about these persistent national concerns.

Government support for the arts and humanities has also, in recent years, been accorded a lower priority, weakening their capacity to make their indispensable contributions to the quality of our civilization.

RESTORING RESPECT FOR VALUES AND ETHICAL BEHAVIOR

And finally, our ACE Commission said, we must restore respect for fundamental values and ethical behavior. Colleges and universities can help, for example, by offering courses that deal with moral reasoning and ethics as well as by making institutional decisions in fair-minded and honorable fashion. And college leaders can encourage student participation in community service activities.

Here I should mention Campus Compact, a coalition of college and university presidents who strive to create public service opportunities for their students. An idea supported by Campus Compact is the establishment of a voluntary national service corps. Under legislation introduced last year by Senator Claiborne Pell, students would receive Federal financial aid in exchange for community service.

We must all be disturbed that the annual surveys of freshmen by Alexander Astin of UCLA indicate a 16-year decline in altruism and concern for others. In light of these findings, all of us who lead colleges and universities should urge our students to help the hungry, homeless, and disadvantaged.

What our commission was saying, in brief, is that in order to overcome its problems and take advantage of its opportunities, the United States depends in fundamental ways on educated men and women and the ideas and skills they generate. The vitality of the United States is, we insisted, directly linked to the character and quality of our institutions of higher learning and of the teaching and scholarship that take place there.

Now, I have asserted that a healthy system of colleges and universities in the United States is essential to meeting the problems and opportunities of the next decade and next century.

And I have looked at five spheres of activity where the modern university seems particularly influential in its impact on society.

If institutions of higher learning are to fulfill their responsibilities, a vigorous response is required not only from our colleges and universities, but also from foundations, corporations, and individual benefactors and from local, State, and Federal governments.

In other words, as we look to the 21st century, it is imperative that we renew, that we reinvigorate, the traditional partnership that has supported higher education in the United States.

THE REAGAN RECORD

I use the words "renew" and "reinvigorate" for as most of you know, the Government-university partnership at the Federal level has been unraveling in recent years. Indeed, at a time when more and more Americans have come to believe that we need all the education we can get, the administration of President Reagan has year after year attempted to reduce support to our schools, colleges, and universities.

Let me talk about just one area of the Federal education budget—student aid. As one of the architects of the Federal student assistance programs, I am proud that they have made an essential contribution to enhancing access to higher education for millions of Americans.

In 15 years of existence, Pell grants—the largest grant program—have helped some 28 million students go to college. In the 1987-88 academic year, more than 2.8 million students received Pell grants, each averaging $1,306.

Guaranteed Student Loans, the biggest of the academic loan programs, have aided over 30 million students since 1966. In 1987-88, the GSL program, which provides a Federal subsidy and insurance for loans to students by banks and credit unions, dispensed more than $8 billion in loans to 3.5 million students.

Despite these and other student financial assistance programs, we have seen over the last decade the reemergence of barriers to equalizing educational opportunity. Too little Federal money for the student aid program has been the biggest obstacle. To cite the most glaring example, Ronald Reagan's budget for fiscal year 1988 would have slashed student assistance by an astonishing 45 percent below the amount Congress voted for fiscal 1987.

Moreover, in recent years, the Reagan administration has attempted to shift more student assistance from grants to loans as the primary means of providing financial aid. Loans now represent more than half the total student aid that college and university students receive.

One consequence of the increased use of loans has been a rapid rise in the default rate. The growth in the volume of loans and the recent jump in the rate of defaults threaten increased funds for Federal student assistance programs.

Another result of the shift from grants to loans, some analysts believe, is that this policy is discouraging low-income and minority students from going to college.

Add to this concern another. I speak of the real damage to our colleges and universities contained in several provisions of the Tax Reform Act of 1986.

First, the legislation taxes scholarships and fellowships to the extent that students do not use the stipends for tuition and equipment—a particular hardship for graduate students in paying for room and board. Second, deductions for interest on student loans are phased out—another cost increase for students.

Third, the legislation mandates a $150 million ceiling per institution on access to tax-exempt financing by private but not public colleges and universities. And finally, the law threatens giving to higher education by eliminating the charitable deduction for non-itemizers and by imposing a minimum tax on gifts of appreciated property.

Moreover, the Technical Corrections Tax bill just signed into law contains further onerous provisions.

One would change the tax treatment of employee educational assistance which allows employers to pay for certain educational expenses of their employees without the employees being taxed on these benefits. The new bill taxes tuition for graduate students who are not teaching or research assistants.

Another provision would permit imposition of an upfront, one-time tax on faculty buyout agreements, changing current law which taxes faculty members over the period of the payout. The consequence will be both a higher tax burden for faculty and much greater difficulty for colleges and universities negotiating retirement agreements with them.

Overall, Mr. Chairman, the cumulative effect of these tax laws is a serious loss for higher education at a time when we should be giving greater support to our colleges and universities.

A STRAINED PARTNERSHIP

Beyond budgets and tax laws, one of the most troubling dimensions of the present administration's posture toward higher education has been its rhetoric. I need not remind you, for example, of the charges leveled by former Secretary of Education William J. Bennett, who attacked colleges and universities—and their students—for a wide range of alleged failures.

Now as I have indicated, the combination of, on the one hand, contracting budgets, destructive tax policies and divisive rhetoric with, on the other, escalating needs has produced serious points of friction in the Government-university relationship.

Let me here simply list some symptoms of the strain:

More and more students now borrow to meet their college costs and will graduate as members of a new debtor generation.

Financial aid cuts constrain student choice and threaten to create a two-tier system of higher education with private colleges for the rich and public ones for everyone else.

Universities, desperate for funds for science facilities, go directly to Congress, bypassing merit-based peer review.

Competition for dollars pits independent institutions of higher learning against public ones, colleges and universities from one region of the country against those from another, and postsecondary education against grade schools and high schools.

Federal officials pour out provocative statements, studies, and schemes that shake public confidence in higher education while colleges and universities, on the defensive, marshal lobbyists, public relations specialists, and polling experts to help polish their tarnished image.

That the Government-university partnership has deteriorated, in my view, is especially damaging to colleges, universities, and their students and faculty. But I believe that this erosion also does grave harm to the country as a whole.

For if current Federal policies represent a serious loss for higher education, they also endanger achieving those national goals that our colleges and universities so clearly serve—a stronger economy, an effective foreign policy, a more secure America, a healthier and better educated people.

BIPARTISAN TRADITION

Here let me reiterate a fundamental fact about Federal support for learning and research over the last generation. It has always been bipartisan. The battle of recent years over appropriate policies toward higher education has not been between Democrats and Republicans. Rather the struggle has been between, on the one hand, the bipartisan tradition of legislators, Presidents and other public officials of both parties who have worked together to strengthen our colleges and universities, and, on the other, a narrow, ideological view that would undermine them.

Fortunately, both Republicans and Democrats in Congress have joined to prevent the most destructive of the present administration's assaults on higher education. Support for education on Capitol Hill, I am very glad to say, has continued to be bipartisan.

PREINAUGURATION REFLECTIONS

Because I speak to you during the transition to a new Presidency, I want to make a few observations about the prospects for higher education under the administration of George Bush.

I think it highly significant that repeatedly on the campaign trail President-elect Bush said he wanted to be an "education President," and that he promised to continue programs for education Mr. Reagan repeatedly attempted to reduce.

Indeed, Mr. Bush made the following pledge: "I can say unequivocally that I will not support any further cuts in total Federal funding for education. We can spend more wisely, but we must not spend less."

The Bush position papers called for increased support for early childhood education; more funds for school reform experiments; improved teaching and magnet schools; and a new college savings program.

During the late months of the Presidential campaign, Mr. Reagan chose as Secretary of Education to replace the departing Secretary William Bennett—an outspoken enemy of many efforts to support education—a person with views decidedly more sympathetic. Lauro F. Cavazos, the first Hispanic-American to serve in any Presidential Cabinet, is himself a former university president. In a clear departure from his predecessor, Secretary Cavazos has both voiced his concern about student financial aid and the education of minorities as well as, believe it or not, expressed admiration for university presidents.

Moreover, Mr. Bush declared that he would urge his Secretary of Education to work with teachers, administrators, and college presidents—the groups Mr. Bennett enthusiastically attacked. And, as we know, the President-elect has announced his intention to continue Secretary Cavazos in his present office.

These are, of course, encouraging developments for higher education in this country, at least with respect to the policy of the Federal Government. Now the new President must deliver on his promises.

Indeed, as a Democrat and former Member of Congress, I take the liberty of offering this advice to my former colleague in the House of Representatives who will next month occupy the White House. Mr. Bush has said he wants to be an "education President" and has signaled a desire to work in harmony with a Congress controlled in both bodies by Democrats. What better way to accomplish these two goals than to present to the lawmakers on Capitol Hill after Inauguration Day a creative and substantive proposal for strengthening American education?

Because the opportunities for conflict between a White House controlled by one party and a Congress controlled by the other will be many, I believe that it is obvious that a President who seeks to lead the Nation effectively must look for ways to forge constructive relationships with Capitol Hill.

In my judgment—and I speak as a Democratic legislator who worked closely with Republicans in this place for over two decades—education is the perfect issue for a Republican President to use as a bridge to a Democratic House and Senate. And I believe that President Bush, for the reasons I have assigned, has a splendid opportunity, in offering his program for education, to rebuild the historic tradition of bipartisan support for teaching and learning in our country.

So, Mr. President-elect, I modestly but most sincerely urge that you extend an olive branch to Congress in the form of serious, solid, imaginative proposals to serve the schools, colleges, and universities of our nation and the students who attend them.

AGENDA FOR ACTION

Now I have asserted that our ability to meet the challenges of the next decade and century depends directly on the capacity of our colleges and universities to produce new knowledge and prepare future generations of scholars and scientists. If we fail to exercise leadership in education, we jeopardize all these dimensions of our national life.

Nor are colleges and universities the only arena to which we must direct our attention and resources. Upgrading the skills of the American work force will demand concerted action across a range of educational fronts, from improved preschool programs to reform of our public schools to adult literacy and worker retraining.

In light of the concerns of this subcommittee and of my position as a university president, I shall, in concluding my testimony, concentrate for the most part on the responsibilities of the Federal Government toward higher education.

If the Nation's colleges and universities are to effectively help prepare America for the competitive challenges of the coming decades, we must, I believe, take several actions. I draw this agenda, Mr. Chairman, in large measure from the report of the ACE Commission on National Challenges in Higher Education. To reiterate, I was an active member of the commission.

1. *We must educate Americans for an increasingly interdependent world.*

As the American economy grows more reliant on international trade, we need people prepared to work effectively with Japanese business executives, Arab oil ministers, European Common Market officials, and Third World governments.

I recommend that the President and Congress take the following actions:

Strengthen international studies and research, including the teaching of foreign languages.

Title VI of the Higher Education Act supports research and instruction in modern foreign languages. Currently authorized at $54 million, title VI supports university-based national resource centers, fellowships, and independent research projects as well as a small number of undergraduate programs. As the legislative father of the forerunner of title VI, the International Education Act of 1966, I urge continued and expanded support of title VI programs.

Encourage student and faculty exchanges to enable Americans to study and teach abroad and students and teachers from other countries to attend American institutions.

I must mention here our most famed international exchange effort, the Fulbright program. First created in 1946, the program reached its peak in the mid-1960's but then suffered a long decline. By 1980, Fulbright funds had fallen, in real terms, to half the dollar amount of 15 years earlier.

From 1981 to 1986, Congress doubled appropriations for the Fulbright exchanges to $89.5 million. Even so, the number of exchange grants was only 5,785—almost 40 percent less than two decades ago. I believe it is in our national interest to reach our previous level of commitment.

Here, Mr. Chairman, you may be interested to know that earlier this month, at the invitation of the Fulbright Commission in Brazil and the United States Information Agency, I spent several days in Brasilia, São Paulo, and Rio de Janeiro.

I took part in a television program, broadcast throughout Latin America, which marked the 10th anniversary of the Hubert H. Humphrey Scholarly Exchange. This program enables midcareer professionals from developing countries to spend a period of time studying at universities in the United States.

Indeed, although the Fulbright exchanges in Brazil represent but a modest investment, I was most impressed by what they have achieved.

Assist colleges and universities in the United States in developing joint educational and research programs with institutions in other countries.

2. *We must support education and research to help revitalize the economy.*

There is widespread agreement that serious attention must be paid to upgrading the skills of the American work force.

To that end, Congress and the President must:

Make a major effort to attract and prepare the ablest men and women as teachers at all levels of our educational system. The Nation's schools and colleges are in particular need of improved mathematics and science instruction.

Make permanent the current provisions of the Tax Code that exempt from taxation the educational benefits that members of the work force receive from their employers.

Encourage State governments, in cooperation with the private sector, to monitor labor force needs so that educational institutions can design training programs to serve their communities more effectively.

At a time when the economic challenges facing America are grave and immediate, we must also attend to the vital infrastructure—both intellectual and physical—that sustains the advanced research from which most innovations and discoveries flow.

In this area, our national leaders should:

Respond to the Nation's need for more scientists and engineers by expanding Federal support for graduate student assistantships and for faculty research. The evidence of shortages is clear; for example, foreign students now account for about 40 percent of enrollments in U.S. graduate schools of engineering and they now receive more than half the doctorates in engineering granted in this country.

Take steps to rebuild the outmoded research and teaching facilities of colleges and universities. A major first step should be to appropriate funds for the new authority granted the National Science Foundation for renovation of graduate and undergraduate research facilities.

Implement existing legislative authority to help colleges and universities obtain access to capital markets for construction and renovation of equipment and facilities; and provide private colleges and universities the same access to the tax-exempt bond market already available to public institutions.

Make permanent and strengthen the R&D tax credit and reexamine those provisions of the Tax Code changed in 1986 and 1988 that threaten graduate study, including taxation of scholarships, fellowships, and some kinds of educational employee assistance; and nondeductibility of interest paid on student loans. Also look to the impact of tax changes governing faculty retirement agreements.

3. *We must reaffirm the national commitment to educational opportunity.*

We cannot expect to restore our productivity as a nation by slamming shut the door of educational opportunity on millions of Americans. But if colleges and universities are to keep their doors open, particularly to low-income students, we need changes in some Federal policies. I recommend our leaders take the following steps:

Intensify efforts to enable disadvantaged students to finish high school and go to college. Programs like Head Start and Upward Bound should be expanded.

Increase funds for grants rather than loans to needy students; this shift will also help solve the loan default problem. A key goal should be adequate funding for the Pell grant program to increase the maximum award to the neediest students and assure that all students receive the full awards for which they are eligible.

Encourage consideration of legislative incentives for families to save for future educational costs. Such incentives might include savings plans, tax deferral of a portion of education expenses and the use of accumulated IRA funds for payments of college tuition.

Expand graduate fellowships for minorities and, especially in the physical sciences and engineering, for women. Fellowship programs should include summer research grants, assistantships, advanced research and training opportunities and early identification of potential recipients.

4. *We must encourage educational activities that address human needs and the quality of life.*

Experience and common sense tell us that we will not easily solve such problems as poverty, unemployment and inadequate health care. But in each case, new knowledge and research can help provide the key.

I recommend, therefore, that the President and Congress:

Increase support for applied social science research in areas vital to the formulation of national policy by agencies such as the Department of Health and Human Services, the Department of Labor, the Department of Housing and Urban Development, and the Department of Education.

Initiate programs to study and improve the quality of public and preventive health care and the delivery of health care services.

Strengthen the capacity of the Federal Government to collect and disseminate statistical data about the demography of the work force, patterns of health and education, and other social and economic indicators.

Reaffirm the importance of the liberal arts tradition in our society. Federal support for the arts and humanities, libraries and museums, for example, should resume its rightful place among the Nation's priorities.

Increase support for the preservation and maintenance of books and other scholarly resources, and through the Library of Congress and other Federal agencies, support for the development of new computerized capabilities for information storage and retrieval.

5. *We must restore respect for fundamental values and ethical behavior.*

Our national leaders, in all sectors of public life, are in a unique position to help rekindle a spirit of social obligation. At the Federal level, they can build on successful existing programs that provide opportunities for college and university students to serve society.

The President and Congress should:

Expand such programs as the Peace Corps and Vista for community service at home and abroad.

Strengthen, through Federal student aid programs, incentives to students for community service work.

Explore ways to encourage students to enter public service careers in such fields as teaching, public health, and social welfare.

Encourage talented men and women, as I am sure the National Commission on the Public Service will do in our final report, to consider entering the career Federal civil service.

CONCLUSION

Let me conclude my testimony with some history that bears directly on what brings us together today.

Over eight decades ago, at the start of the 20th century, Great Britain was caught up in a spirited public debate over the eclipse of British economic might by the upstart Americans. A leading industrialist of the time organized a commission of businessmen, labor leaders, and educators to travel to the United States to find out why the American economy was booming and the British sputtering.

That commission, which issued its report in 1902, reached the following conclusion:

> American industrial efficiency and its openness to the introduction of labor-saving innovations [were] largely due to the superior education of the American worker * * *. It is the interest in and expansion of education on every level in the U.S. and the willingness of the U.S. Government to spend money on education that is making American industry so threatening to Britain.

This connection between education and a nation's creativity and prosperity was echoed 86 years later in an editorial which appeared in the Financial Times of London of November 15, 1988, entitled, "In Defense of a Good Schooling."

The piece contains this passage:

> In today's world, and even more in tomorrow's, an educated population is going to be by far the most important national resource of each country. Education should be considered not merely as a "popular spending programme" but as a key element—if not the key element—in national security * * *."

It is, Mr. Chairman, the Members of the Congress of the United States who, beginning in 1958 with the passage of the National Defense Education Act and extending to the present, have taken the initiative to support education as an indispensable national resource. And Mr. Chairman, I am confident that, as we look to the future of our country, it will be the Congress of the United States on whom the American people can continue to depend for such leadership.

Thank you, Mr. Chairman, for this opportunity to appear before you.

[The prepared statement of Mr. Brademas follows:]

PREPARED STATEMENT OF HON. JOHN BRADEMAS

Introductory Remarks

Mr. Chairman and members of the Subcommittee, I should like at the outset of my testimony to extend warm greetings to the distinguished members of the Subcommittee, especially the Chairman, my old and valued friend, Congressman Scheuer, long an imaginative and creative legislator. Now, of course, I live in the city and state he so ably represents. Indeed, I offer all members of the Subcommittee my best wishes as you prepare to carry out your responsibilities in the 101st Congress.

I am honored to appear today in such distinguished company including two other good friends, my former colleague, now Governor Jim Blanchard of Michigan; and Jule Sugarman, Secretary of Social and Health Resources of the State of Washington; as well as Governor John McKernan, Jr. of Maine and Admiral James Watkins.

It is, of course, a particular pleasure for me to be here because, as you know, I served as a Member of Congress for twenty-two years. I regard that service as one of the most gratifying periods of my life, and I continue to take great pride in having made some contribution during that time to shaping the policies of our national government in support of education, the arts and other areas of American life.

For over seven-and-a-half years, I have had the privilege of serving as president of New York University, one of the foremost urban universities in the nation and, with some 47,000 students in fourteen schools, colleges and divisions and an annual operating budget of $900 million, the largest private university in the world. I must tell you that as a result of my experience on the campus, I am even more convinced of the wisdom of the judgments that you and my other colleagues in Congress and I made over the last generation in forging policies to assist the colleges and universities of our country and the students who attend them.

You will also not be surprised to learn that I have not lost my concern about questions of public policy. I have sat on special task forces and study groups that have investigated a range of issues--currently, for example, the National Commission on the Public Service, chaired by Paul Volcker; the Carnegie Commission on Science, Technology and Government; and the Consultant Panel to the Comptroller General of the United States.

Moreover--something I could not do as a Member of Congress--I now also sit on several corporate and foundation boards, including Governor Cuomo's New York State Council on Fiscal and Economic Priorities, which I chair.

So I come before you today as one who wears several hats: that of a former Member of Congress; president of a major private university; and one who now devotes some attention to matters of public policy.

You have asked me to testify on national programs for education, particularly higher education, and the relationship between an investment in education and the country's future. Let me begin by discussing the changing role of the Federal government in education and the pattern of commitments made by past Presidents and Congresses.

For as we meet at the close of 1988 and prepare for the swearing in of a new President and a new Congress, we should keep in mind that the current structure of Federal contribution to our schools, colleges and universities represents the deliberate and thoughtful work over the past three decades of both chief executives and legislators.

Then I want to outline some of the major challenges facing the country that higher education can help meet.

I want also to comment on policies of the departing national Administration, and speak particularly of the ongoing issue of assuring access to higher education. Then I want to weigh the prospects for improvement with a new President and Congress.

I shall conclude by making bold to outline an agenda for consideration by President Bush and the 101st Congress to ensure that America's colleges and universities are prepared for the nation's needs of the 21st century.

The Federal Role in Education

As you all know, the national government has been involved in education in one way or another for a century and a half, with Federal initiatives adapting to the changing demands of an expanding society. The benchmarks of that evolution are well-known:

- As early as 1787, Congress, through the Northwest Ordinance, reserved land for public schools.
- Nearly a century later, the Morrill Act made possible the establishment of land grant colleges and universities.
- The G.I. Bill of World War II, one of the most sweeping Federal aid to education programs ever enacted, afforded millions of returning veterans, including me, the means to go to college.
- The National Defense Education Act of 1958 provided Federal funds for improving the teaching of mathematics, science and foreign languages.

Each era has produced its own stimulus and rationale for the use of Federal tax dollars to help education. The movement toward land grant colleges in the 1860s took place in the context of America's entrance into the industrial age and the necessity to prepare students in the sciences, mechanical arts, agricultural and other skills essential to that time. The G.I. Bill arose from a sense of national obligation to our returning soldiers.

In 1958 the justification for an expanded Federal role in education came with the Soviet launching of Sputnik. With the passage of the National Defense Education Act, a new Federal purpose in education was articulated:

> The national interest requires...that the federal government give assistance to education for programs which are important to our national defense.

I entered Congress the year following enactment of the NDEA, sought and won assignment to the Committee on Education and Labor, and remained on the Committee throughout my service in Congress.

Federal activities in education expanded significantly during that time, and I took part in the process.

Four Commitments

Here briefly, during my years in Congress, is what we in Washington sought to accomplish.

First, we made--and when I say "we," I include Presidents, Senators and Representatives of both parties--a commitment that education be accessible to those likely to be excluded.

Obviously, I cite here the Elementary and Secondary Education Act of 1965, which for the first time provided substantial Federal funds to grade schools and high schools. In addition, there were Head Start, the Job Corps, the Neighborhood Youth Corps, Upward Bound and all the other components of the War on Poverty. We also created vocational education and manpower training programs as well as a measure on which I labored long, the Education for All Handicapped Children Act.

To assure talented but needy young men and women a chance for a college education, Presidents of both parties--Eisenhower, Kennedy, Johnson, Nixon, Ford and Carter--as well as Democrats and Republicans in Congress, put in place--from the National Defense Education Act through a series of higher education laws--a fabric of grants, loans and work-study jobs.

We made a second commitment during my time in Washington--to assist our institutions of culture. The milestones on this path included the National Endowment for the Arts and Humanities as well as programs to help public libraries and museums--all measures that I championed.

There was a third commitment--to strengthen international studies at our colleges and universities. Here I cite the International Education Act of 1966 and other efforts to encourage teaching and learning about the peoples and cultures of the rest of the world.

A fourth commitment was to research. Support from the national government has been crucial in enhancing our understanding of ourselves and our universe through, among other entities, the National Science Foundation, the National Institutes of Health and the National Institute of Education.

These then were the four commitments when I was on Capitol Hill that guided and informed our actions as lawmakers for education.

Scholarship and National Challenges

In the years since I left Washington, D.C. for Washington Square, there has appeared a flood of studies and reports that have underscored the close connection between education and the country's future.

There is rising recognition on the part of the people of the United States that what we as a nation do--or fail to do--to support education will in large part determine America's well-being till the end of this century and into the next one.

Here I note that last year I served on the Commission on National Challenges in Higher Education, sponsored by the American Council on Education and chaired by William Friday, president-emeritus of the University of North Carolina. I know that Robert Atwell, the president of ACE, will be testifying before this Subcommittee tomorrow. Last December, the 33-member Commission, composed of college and university presidents and business and labor leaders, issued a "Memorandum to the 41st President of the United States."

Our Commission urged the next President to place the problems and perspectives of higher education in the context of the formidable challenges confronting the nation.

My colleagues and I spoke of five challenges that we believe the United States will face, and that our colleges and universities can help our newly elected leaders meet.

As I enumerate the challenges highlighted by the ACE Commission, I shall also mention some other studies before and since that reinforce our findings.

Strengthening International Education

First, our Commission said, we must educate Americans for an increasingly interdependent world. To conduct effective foreign, economic and defense policies, the 41st President and the new Congress must turn for knowledge and expertise to our institutions of higher learning.

Indeed, the people of the United States, in whose hands, for better or worse, lies much of the responsibility for building a peaceful and stable world, must do a far better job than we have been doing of learning about other cultures, countries and languages.

In 1979, a Commission on Foreign Language and International Studies, appointed by President Carter, described our "scandalous incompetence" in the United States in foreign languages and declared itself "profoundly alarmed" by its inquiry.

Nearly a decade after the 1979 report, the news is not much better. In a poll conducted last summer by the National Geographic Society of 11,000 people in nine countries about their knowledge of basic facts of geography and world affairs, Americans ranked in the bottom third.

Some of the disheartening findings:

- Half the adult Americans could not identify Nicaragua as the country where the Contras and Sandinistas are fighting;
- More than half could not find Japan on a map;
- A third of the Americans polled could not name a single member of NATO.

Revitalizing the American Economy

A second challenge for the new President, our Commission said, is that in an increasingly competitive world, we must revitalize the American economy. A critical determinant of our economic health in the remainder of this century and beyond will be our colleges and universities. As major sources of discovery, innovation and invention, they can contribute significantly to the renewal of our advanced, technology-based economy.

But the need among others for enhanced investment to upgrade and replace outmoded facilities and equipment--the laboratories, libraries and classrooms that constitute the infrastructure of the academic enterprise--will require substantial public funds.

A panel of the White House Science Council, co-chaired by David Packard, chairman of Hewlett-Packard and former Secretary of Defense, and Professor Allan Bromley of Yale, deplores the deterioration of facilities and obsolescence of equipment. The needs in this area are staggering--some estimates run as high as $70 billion.

Indeed, more and more voices are urging renewed attention to education, research and development as essential to restoring, America's economic position in the world. Among the most prominent of those making this case are the panel of the White House Science Council I have just mentioned; the Cuomo Commission on Trade and Competitiveness; Erich Bloch, director of the National Science Foundation; both the Congressional Caucus on Competitiveness and the Council on Competitiveness; and the National Governors Association.

Expanding Educational Opportunity

A third challenge for President Bush and the nation, according to our Commission: We must expand educational opportunity. Persistent unemployment in some areas and a rapidly growing underclass require that we open the doors to learning at every level.

But a recent report from the American Council on Education and the Education Commission of the States warns of an ominous trend--a decline in minority participation in higher education at all levels. As the report says, "During the same period when the pool of minority high school graduates was becoming bigger and better than ever, minority college attendance rates fell and have remained disproportionately low."

Although enrollment of black students in American colleges and universities rose during the 1970s, between 1980 and 1984, it dropped by more than three percent. In like fashion, although the number of young Hispanics of college-age in the United States grew by 62 percent over the past decade, the number enrolled in colleges and universities increased by only 43 percent.

Moreover, the number of black men earning doctorates fell by nearly 27 percent in the past ten years with fewer of them studying medicine, dentistry, business and law. During that same period, only 2.1 percent of all doctorates granted in the United States were awarded to Hispanics. In certain fields, minorities have become virtually non-existent. For example, in all of 1986, only one black received a doctorate in computer science.

Improving the Quality of Life

Fourth, our ACE Commission said, we must address human needs and the quality of life. Although there is no single set of remedies for such tough problems as poverty, homelessness, environmental pollution and poor health care, finding solutions requires new knowledge and research.

Unfortunately, as public officials have increased the proportion of Federal research funds for defense--military research now accounts for two-thirds of Federal R&D funds--they have scaled back support of social science research directed at such problems as housing, unemployment, adult literacy and poverty. In consequence, we know much less today than we should about these persistent national concerns.

Government support for the arts and humanities has also, in recent years, been accorded a lower priority, weakening their capacity to make their indispensable contributions to the quality of our civilization.

Restoring Respect for Values and Ethical Behavior

And finally, our ACE Commission said, we must restore respect for fundamental values and ethical behavior. Colleges and universities can help, for example, by offering courses that deal with moral reasoning and ethics as well as by making institutional decisions in fair-minded and honorable fashion. And college leaders can encourage student participation in community service activities.

Here I should mention Campus Compact, a coalition of college and university presidents who strive to create public service opportunities for their students. An idea supported by Campus Compact is the establishment of a voluntary national service corps. Under legislation introduced last year by Senator Claiborne Pell, students would receive Federal financial aid in exchange for community service.

We must all be disturbed that the annual surveys of freshmen by Alexander Astin of UCLA indicate a 16-year decline in altruism and concern for others. In light of these findings, all of us who lead colleges and universities should urge our students to help the hungry, homeless and disadvantaged.

What our Commission was saying, in brief, is that in order to overcome its problems and take advantage of its opportunities, the United States depends in fundamental ways on educated men and women and the ideas and skills they generate. The vitality of the United States is, we insisted, directly linked to the character and quality of our institutions of higher learning and of the teaching and scholarship that take place there.

* * * * * * * * * * *

Now I have asserted that a healthy system of colleges and universities in the United States is essential to meeting the problems and opportunities of the next decade and next century.

And I have looked at five spheres of activity where the modern university seems particularly influential in its impact on society.

But for institutions of higher learning to fulfill their responsibilities will require a vigorous response not only from our colleges and universities but also from foundations, corporations and individual benefactors and from local, state and Federal governments.

In other words, as we look to the 21st century, it is imperative that we renew, that we reinvigorate, the traditional partnership that has supported higher education in the United States.

The Reagan Record

I use the words "renew" and "reinvigorate" for as most of you know, the government-university partnership at the Federal level has in recent years been unraveling. Indeed, at a time when more and more Americans have come to believe that we need all the education we can get, the Administration of President Reagan has year after year attempted to reduce support to our schools, colleges and universities.

Let me talk about just one area of the Federal education budget--student aid. As one of the architects of the Federal student assistance programs, I am proud that they have made an essential contribution to enhancing for millions of Americans access to higher education.

In fifteen years of existence, Pell Grants--the largest grant program--have helped some 28 million students go to college. In the 1987-88 academic year, more than 2.8 million students received Pell Grants, each averaging $1,306.

Guaranteed Student Loans, the biggest of the academic loan programs, have aided over 30 million students since 1966. In 1987-88, the GSL program, which provides a Federal subsidy and insurance for loans to students by banks and credit unions, dispensed more than $8 billion in loans to 3.5 million students.

Despite these and other student financial assistance programs, we have seen over the last decade the re-emergence of barriers to equalizing educational opportunity. Too little Federal money for the student aid program has been the biggest obstacle. To cite the most glaring example, Ronald Reagan's budget for fiscal year 1988 would have slashed student assistance by an astonishing 45 percent below the amount Congress voted for fiscal 1987.

Moreover, in recent years, the Reagan Administration has attempted to shift more student assistance from grants to loans as the primary means of providing financial aid. Loans now represent more than half the total student aid that college and university students receive.

One consequence of the increased use of loans has been a rapid rise in the default rate. The growth in the volume of loans, and the recent jump in the rate of defaults, threaten increased funds for Federal student assistance programs.

Another result of the shift from grants to loans, some analysts believe, is that this policy is discouraging low-income and minority students from going to college.

Add to this concern another. I speak of the real damage to our colleges and universities contained in several provisions of the Tax Reform Act of 1986.

First, the legislation taxes scholarships and fellowships to the extent that students do not use the stipends for tuition and equipment, a particular hardship for graduate students in paying for room and board. Second, deductions for interest on student loans are phased out, another cost increase for students.

Third, the legislation mandates a $150 million ceiling per institution on access to tax-exempt financing by private but not public colleges and universities. And finally, the law threatens giving to higher education by eliminating the charitable deduction for non-itemizers and by imposing a minimum tax on gifts of appreciated property.

Moreover, the Technical Corrections Tax Bill just signed into law contains further onerous provisions.

One would change the tax treatment of employee educational assistance, which allows employers to pay for certain educational expenses of their employees, without the employees being taxed on these benefits. The new bill taxes tuition for graduate students who are not teaching or research assistants.

Another provision would permit imposition of an upfront, one-time tax on faculty buyout agreements, changing current law which taxes faculty members over the period of the pay-out. The consequence will be both a higher tax burden for faculty and much greater difficulty for colleges and universities negotiating retirement agreements with them.

Overall, Mr. Chairman, the cumulative effect of these tax laws is a serious loss for higher education at a time when we should be giving greater support to our colleges and universities.

A Strained Partnership

Beyond budgets and tax laws, one of the most troubling dimensions of the present Administration's posture toward higher education has been its rhetoric. I need not remind you, for example, of the charges leveled by former Secretary of Education William J. Bennett, who attacked colleges and universities--and their students--for a wide range of alleged failures.

Now as I have indicated, the combination of, on the one hand, contracting budgets, destructive tax policies and divisive rhetoric with, on the other, escalating needs has produced serious points of friction in the government-university relationship.

Let me here simply list some symptoms of the strain.

- More and more students now borrow to meet their college costs and will graduate as members of a new debtor generation.
- Financial aid cuts constrain student choice and threaten to create a two-tier system of higher education with private colleges for the rich and public ones for everyone else.

- Universities, desperate for funds for science facilities, go directly to Congress, bypassing merit-based peer review.
- Competition for dollars pits independent institutions of higher learning against public ones, colleges and universities from one region of the country against those from another, and postsecondary education against grade schools and high schools.
- Federal officials pour out provocative statements, studies and schemes that shake public confidence in higher education while colleges and universities, on the defensive, marshall lobbyists, public relations specialists and polling experts to help polish their tarnished image.

That the government-university partnership has deteriorated, in my view, is especially damaging to colleges, universities and their students and faculty. But I believe that this erosion also does grave harm to the country as a whole.

For if current Federal policies represent a serious loss for higher education, they also endanger achieving those national goals that our colleges and universities so clearly serve--a stronger economy, an effective foreign policy, a more secure America, a healthier and better educated people.

Bipartisan Tradition

Here let me reiterate a fundamental fact about Federal support for learning and research over the last generation. It has always been bipartisan. The battle of recent years over appropriate policies toward higher education has not been between Democrats and Republicans. Rather the struggle has been between, on the one hand, the bipartisan tradition of legislators, Presidents and other public officials of both parties who have worked together to strengthen our colleges and universities, and, on the other, a narrow, ideological view that would undermine them.

Fortunately, both Republicans and Democrats in Congress have joined to prevent the most destructive of the present Administration's assaults on higher education. Support for education on Capitol Hill, I am very glad to say, has continued to be bipartisan.

Pre-Inauguration Reflections

Because I speak to you during the transition to a new presidency, I want to make a few observations about the prospects for higher education under the Administration of George Bush.

I think it highly significant that repeatedly on the campaign trail President-elect Bush said he wanted to be an "education President," and that he promised to continue programs for education Mr. Reagan repeatedly attempted to reduce.

Indeed, Mr. Bush made the following pledge: "I can say unequivocally that I will not support any further cuts in total

Federal funding for education. We can spend more wisely, but we must not spend less."

The Bush position papers called for increased support for early childhood education; more funds for school reform experiments; improved teaching and magnet schools; and a new college savings program.

During the late months of the Presidential campaign, Mr. Reagan chose as Secretary of Education to replace the departing Secretary William Bennett--an outspoken enemy of many efforts to support education--a person with views decidedly more sympathetic. Dr. Lauro F. Cavazos, the first Hispanic-American to serve in any Presidential Cabinet, is himself a former university president. In a clear departure from his predecessor, Secretary Cavazos has both voiced his concern about student financial aid and the education of minorities as well as, believe it or not, expressed admiration for university presidents!

Moreover, Mr. Bush declared that he would urge his Secretary of Education to work with teachers, administrators and college presidents, the groups Mr. Bennett enthusiastically attacked. And, as we know, the President-elect has announced his intention to continue Secretary Cavazos in his present office.

These are, of course, encouraging developments for higher education in this country, at least with respect to the policy of the Federal government. Now the new President must deliver on his promises.

Indeed, as a Democrat and former Member of Congress, I take the liberty of offering this advice to my former colleague in the House of Representatives who will next month occupy the White House. Mr. Bush has said he wants to be an "education president" and has signalled a desire to work in harmony with a Congress controlled in both bodies by Democrats. What better way to accomplish these two goals than to present to the lawmakers on Capitol Hill after Inauguration Day a creative and substantive proposal for strengthening American education?

Because the opportunities for conflict between a White House controlled by one party and a Congress controlled by the other will be many, I believe it obvious that a president who seeks to lead the nation effectively must look for ways to forge constructive relationships with Capitol Hill.

In my judgment--and I speak as a Democratic legislator who worked closely with Republicans in this place for over two decades--education is the perfect issue for a Republican President to use as a bridge to a Democratic House and Senate. And I believe that President Bush, for the reasons I have assigned, has a splendid opportunity, in offering his program for education, to rebuild the historic tradition of bipartisan support for teaching and learning in our country.

So, Mr. President-elect, I modestly but most sincerely urge that you extend an olive branch to Congress in the form of serious, solid, imaginative proposals to serve the schools, colleges and universities of our nation and the students who attend them.

Agenda for Action

Now I have asserted that our ability to meet the challenges of the next decade and century depends directly on the capacity of our colleges and universities to produce new knowledge and prepare future generations of scholars and scientists. If we fail to exercise leadership in education, we jeopardize all these dimensions of our national life.

Nor are colleges and universities the only arena to which we must direct our attention and resources. Upgrading the skills of the American workforce will demand concerted action across a range of educational fronts, from improved pre-school programs to reform of our public schools to adult literacy and worker retraining.

In light of the concerns of this Committee and of my position as a university president, I shall, in concluding my testimony, concentrate for the most part on the responsibilities of the Federal government toward Higher Education.

If the nation's colleges and universities are effectively to help prepare America for the competitive challenges of the coming decades, we must, I believe, take several actions. I draw this agenda, Mr. Chairmen, in large measure from the report of the ACE Commission on National Challenges in Higher Education. To reiterate, I was an active member of the Commission.

I. We must educate Americans for an increasingly interdependent world.

As the American economy grows more reliant on international trade, we need people prepared to work effectively with Japanese business executives, Arab oil ministers, European Common Market officials and Third World governments.

I recommend that the President and Congress take the following actions:

- Strengthen international studies and research, including the teaching of foreign languages.

  Title VI of the Higher Education Act supports research and instruction in modern foreign languages. Currently authorized at $54 million, Title VI supports university-based national resource centers, fellowships and independent research projects as well as a small number of undergraduate programs. As legislative father of the forerunner of Title VI, the International Education Act of 1966, I urge continued and expanded support of Title VI programs.

- Encourage student and faculty exchanges to enable Americans to study and teach abroad and students and teachers from other countries to attend American institutions.

  I must mention here our most famed international exchange effort, the Fulbright program. First created in 1946, the program reached its peak in the mid-1960s but then suffered a long decline. By 1980, Fulbright funds had fallen, in real terms, to half the dollar amount of 15 years earlier.

  From 1981 to 1986, Congress doubled appropriations for the Fulbright exchanges to $89.5 million. Even so, the number of exchange grants was only 5,785--almost 40 percent less than two decades ago. I believe it is in our national interest to reach our previous level of commitment.

  Here, Mr. Chairman, you may be interested to know that earlier this month, at the invitation of the Fulbright Commission in Brazil and the United States Information Agency, I spent several days in Brasilia, São Paulo and Rio de Janeiro.

  I took part in a television program, broadcast throughout Latin America, which marked the 10th Anniversary of the Hubert H. Humphrey Scholarly Exchange. This program enables mid-career professionals from developing countries to spend a period of time studying at universities in the United States.

  Indeed, although the Fulbright exchanges in Brazil represent but a modest investment, I was most impressed by what they have achieved.

- Assist colleges and universities in the United States in developing joint educational and research programs with institutions in other countries.

2. We must support education and research to help revitalize the economy.

There is widespread agreement that serious attention must be paid to upgrading the skills of the American workforce.

To that end, Congress and the President must:

- Make a major effort to attract and prepare the ablest men and women as teachers at all levels of our educational system. The nation's schools and colleges are in particular need of improved mathematics and science instruction.

- Make permanent the current provisions of the tax code that exempt from taxation the educational benefits that members of the workforce receive from their employers.

- Encourage state governments, in cooperation with the private sector, to monitor labor force needs so that educational institutions can design training programs to serve their communities more effectively.

At a time when the economic challenges facing America are grave and immediate, we must also attend to the vital infrastructure--both intellectual and physical--that sustains the advanced research from which most innovations and discoveries flow.

In this area, our national leaders should:

o Respond to the nation's need for more scientists and engineers by expanding Federal support for graduate student assistantships and for faculty research. The evidence of shortages is clear; for example, foreign students now account for about 40% of enrollments in U.S. graduate schools of engineering and they now receive more than half the doctorates in engineering granted in this country.

o Take steps to rebuild the outmoded research and teaching facilities of colleges and universities. A major first step should be to appropriate funds for the new authority granted the National Science Foundation for renovation of graduate and undergraduate research facilities.

o Implement existing legislative authority to help colleges and universities obtain access to capital markets for construction, renovation and equipment of facilities; and provide private colleges and universities the same access to the tax-exempt bond market already available to public institutions.

o Make permanent and strengthen the R&D tax credit and re-examine those provisions of the tax code changed in 1986 and 1988 that threaten graduate study, including taxation of scholarships and fellowships; some kinds of educational employee assistance and non-deductibility of interest paid on student loans. Also look to the impact of tax changes governing faculty retirement agreements.

3. We must reaffirm the national commitment to educational opportunity.

We cannot expect to restore our productivity as a nation by slamming shut the door of educational opportunity on millions of Americans. But if colleges and universities are to keep their doors open, particularly to low-income students, we need changes in some Federal policies. I recommend our leaders take the following steps:

o Intensify efforts to enable disadvantaged students to finish high school and go to college. Programs like Head Start and Upward Bound should be expanded.

o Increase funds for grants rather than loans to needy students; this shift will also help solve the loan default problem. A key goal should be adequate funding for the Pell Grant program to increase the maximum award to the neediest students and assure that all students receive the full awards for which they are eligible.

o Encourage consideration of legislative incentives for families to save for future educational costs. Such incentives might include savings plans, tax deferral of a portion of education expenses and the use of accumulated IRA funds for payments of college tuition.

o Expand graduate fellowships for minorities and, especially in the physical sciences and engineering, for women. Fellowship programs should include summer research grants, assistantships, advanced research and training opportunities and early identification of potential recipients.

4. We must encourage educational activities that address human needs and the quality of life.

Experience and common sense tell us that we will not easily solve such problems as poverty, unemployment and inadequate health care. But in each case, new knowledge and research can help provide the key.

I recommend, therefore, that the President and Congress:

o Increase support for applied social science research in areas vital to the formulation of national policy by agencies such as the Department of Health and Human Services, the Department of Labor, the Department of Housing and Urban Development, and the Department of Education.

o Initiate programs to study and improve the quality of public and preventive health care and the delivery of health care services.

o Strengthen the capacity of the Federal government to collect and disseminate statistical data about the demography of the work force, patterns of health and education, and other social and economic indicators.

o Reaffirm the importance of the liberal arts tradition in our society. Federal support for the arts and humanities, libraries and museums, for example, should resume its rightful place among the nation's priorities.

o Increase support for the preservation and maintenance of books and other scholarly resources, and through the Library of Congress and other Federal agencies, support for the development of new computerized capabilities for information storage and retrieval.

5. We must restore respect for fundamental values and ethical behavior.

Our national leaders, in all sectors of public life, are in a unique position to help rekindle a spirit of social obligation. At the Federal level, they can build on successful existing programs that provide opportunities for college and university students to serve society.

The President and Congress should:

- Expand such programs as the Peace Corps and Vista for community service at home and abroad.
- Strengthen, through Federal student aid programs, incentives to students for community service work.
- Explore ways to encourage students to enter public service careers in such fields as teaching, public health and social welfare.
- Encourage talented men and women, as I am sure the National Commission on the Public Service will do in our final report, to consider entering the career Federal civil service.

Conclusion

Let me conclude my testimony with some history that bears directly on what brings us together today.

Over eight decades ago, at the start of the 20th century, Great Britain was caught up in a spirited public debate over the eclipse of British economic might by the upstart Americans. A leading industrialist of the time organized a commission of businessmen, labor leaders and educators to travel to the United States to find out why the American economy was booming and the British sputtering.

That commission, which issued its report in 1902, reached the following conclusion:

> American industrial efficiency and its openness to the introduction of labor-saving innovations [were] largely due to the superior education of the American worker.... It is the interest in and expansion of education on every level in the U.S. and the willingness of the U.S. government to spend money on education that is making American industry so threatening to Britain.

This connection between education and a nation's creativity and prosperity was echoed eighty-six years later in an editorial which appeared in the Financial Times of London of November 15, 1988, entitled, "In defense of a good schooling."

The piece contains this passage:

> In today's world, and even more in tomorrow's, an educated population is going to be by far the most important national resource of each country. Education should be considered not merely as a "popular spending programme" but as a key element--if not the key element--in national security...."

It is, Mr. Chairman, the Members of the Congress of the United States who, beginning in 1958 with the passage of the National Defense Education Act and extending to the present, have taken the initiative to support education as an indispensable national resource. And Mr. Chairman, I am confident that, as we look to the future of our country, it will be the Congress of the United States on whom the American people can continue to depend for such leadership.

Thank you, Mr. Chairman, for this opportunity to appear before you.

Representative **Scheuer**. Thank you, Congressman Brademas, for that marvelous trip across the length and breadth of American education.

I share your optimism that President-elect Bush will try to play the role of education President. There are many straws in the wind to indicate that. Certainly some of his statements in the latter part of his campaign.

And I think it is important, and I say this very seriously, that Barbara Bush, his partner, is a dedicated and knowledgeable supporter of public education. She will provide a constant wellspring of support and encouragement for the President as he goes about the job of truly emerging as the education President, which we fondly hope he will.

I would like to introduce a member-elect of Congress who has joined us, Nita Lowey, the member-elect from the 20th Congressional District of New York, who fate seems to destine for a great role on the Education Committee come January.

Now I would like to yield to my colleague Pat Williams for questions.

Representative **Williams**. Thank you, Mr. Chairman.

Mr. Brademas, can you point to what might be in your judgment the most significant or one of the most significant changes in legislation over the last few years which has affected your institution of higher education? And that might be a positive effect or a negative effect.

As you know, 3 years ago we authorized the Postsecondary Education Act; a year or so ago changes were made in the tax laws; there have been other changes in the past several years. Can you point to one or a couple that have made significant differences?

Mr. **Brademas**. Yes, I can, Congressman Williams. One of the particular concerns to me, and I know to you, has to do with student aid. The fact of the matter is that although, as I said in my testimony, in the last several years both Republicans and Democrats in Congress joined to prevent the most damaging of the administration's proposed very sharp reductions in student assistance, nonetheless in the earliest years of the present administration there were some substantial reductions in student assistance.

It has been my observation that you here on Capitol Hill have been engaged in basically a damage control operation. You have not really been able to provide the additional appropriations necessary even to keep up; you've been fighting to do that.

New York University, which, as I said, is a very large urban university, where we have a very large number of students who come from low- and middle-income families, was founded 157 years ago basically as a university for the sons and daughters of immigrants. We still are, although they are coming from different parts of the world than in earlier years. That reduction in student assistance money has caused us serious problems in keeping our doors open to talented but needy students.

What have we done? First of all, 80 percent of the full-time students at New York University have part-time jobs. I used to get my back up when Mr. Bennett suggested that students were driving around in their automobiles and playing stereo sets and chasing off to Florida on vacation. Not at New York University. They work very, very hard indeed.

Second, I would say that about 65 to 70 percent of our students have some form of student assistance, not all Federal, but many of them do have Federal funds.

We at the university have worked very hard to help students. Under my regime at NYU, we have more than doubled the amount of student assistance from university resources.

There is another point that I think is very important to mention in response to your question, Congressman Williams, and that runs to a point I made earlier in my testimony when I spoke of the change in the tax law that imposes a ceiling of $150 million in access to tax-exempt financing on the part of independent or private colleges and universities but continues such access for State universities or public universities.

When I was a Member of Congress, the idea that the Education and Labor Committee would write a student aid bill that would say, to take my native State of Indiana, well, you can get a guaranteed student loan or a Pell grant to study at Purdue University or Indiana University but you can't get one if you want to study at the University of Notre Dame, St. Mary's College, or Goshen College, a Mennonite institution, would have been regarded as outrageous. For on the Education and Labor Committee, on which three of us here served, we said we want to provide equitable treatment for both public and private institutions.

As Congressman Jim Scheuer will agree, John Brademas while a Member of Congress was a militant champion of both public and private higher education—that pluralism is a key to the success of our system—and although I lead a private university now, I still am.

That change in the tax law marked, at least for the first time I know of, the writing into law of an invidious distinction for private institutions. I think morally that is not proper.

But beyond that, there is an assumption—and I know that many Members of Congress feel this way—that private institutions are rich and that we are all Harvard. I am a graduate of Harvard University and a loyal son of Cambridge. But I must tell you, Mr. Chairman, that if you look at the per capita student endowment of private colleges and universities in the United States, you will see an enormous range.

I do not say this critically, by the way. I am not being critical of my colleagues' institutions. I say this as a matter of descriptive fact. Some institutions, especially some institutions in the Ivy League—and I reiterate, I am a product of the Ivy League—have very large endowments per student.

Other institutions, like the University of Notre Dame, in my home town—and I sit on the board of Notre Dame, and St. Mary's College where I used to teach—have far less endowment per student. New York University, although we have been very successful in raising money from the private sector, is very low on the totem pole with respect to per capita student endowment.

So when Members of Congress with the best will in the world say we want to eliminate what we perceive to be a misuse of access to the tax-exempt bond market and therefore we are going to treat colleges and universities although they are private, nonprofit institutions, the sector of which I speak, as if they were somehow commercial ventures making a great deal of money or using the tax laws in some inappropriate way, I think do a serious injustice to institutions like mine that simply do not have some vast pot of gold into which we can dip.

Those, Congressman Williams, are two areas where I think real damage has been done. I have said in my prepared statement and reiterate now that those are two areas to which I hope Congress will give attention.

Representative SCHEUER. Congresswoman Olympia Snowe.

Representative SNOWE. Thank you, Mr. Chairman.

Thank you, John, for your outstanding testimony.

What has contributed to the increased cost of education in this country?

I was just looking at some statistics. According to the College Board, the cost of attendance when adjusted for inflation has increased 21 percent at public 2-year colleges, 25 percent at public universities, 26 percent at public 4-year schools, and 40 percent at private universities between 1980 and 1981 and between 1986 and 1987.

Mr. BRADEMAS. There are several factors.

Mr. Chairman, if I would be permitted to put on my former hat and ask unanimous consent, I would like to ask consent that there be included in the record an article by Lynne P. Brown, who used to work for me when I was majority whip of the House and now serves on my staff at New York University, from a recent issue of New York University Magazine addressing the question of the cost of higher education.

Representative SCHEUER. Without objection, it is so ordered.

[The article follows:]

The Ascent of Higher Education

BY LYNNE P. BROWN

AFTER FIFTEEN YEARS OF RELATIVE tranquility, colleges are embroiled in controversy this spring. But unlike an earlier era, when campus unrest was sparked by student protests against the establishment, this time the instigator *is* the establishment—in the person of the highest-ranking government official in charge of education, Secretary William Bennett.

The focus of the debate, which has been carried on in print and public appearances, is money. On one side is Bennett who, over the last year, has accused colleges and universities of being "under-accountable and under-productive." Students and their parents should "kick the tires" of higher education to ensure that they are getting their money's worth, claims Bennett. Arrayed against him are leaders of the academic community, who are crying foul and accusing the Secretary of manipulating data in an attempt to discredit their institutions and perhaps divert attention from the budget-cutting measures of the Reagan Administration that have hurt higher education. Over the past several months, Bennett and his critics have traded charges in an escalating minuet of point-counterpoint.

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NYU President John Brademas

NANCY MORAN

Chancellor L. Jay Oliva

When the Secretary of Education used the occasion of Harvard's 350th birthday last fall to take that university and its sister institutions to task for flabby curricula, lapsed attention to moral issues, and preoccupation with money, Harvard president Derek Bok followed with a stinging rebuttal to Bennett's charges. Bok defended Harvard's "core curriculum," which many colleges use as a model, pointed to a resurgence of courses in moral and ethical reasoning on campuses across the nation, and admonished the Secretary for dealing with complicated financial issues such as appropriate levels of student aid "by rhetorical statements about divesting students of their stereos and their vacations at the beach." (At a press conference two years ago, Bennett suggested that college students facing cutbacks in financial aid should consider "divestitures of certain sorts—stereo divestiture, automotive divestiture, three-weeks-at-the-beach divestiture.")

As evidence of price-gouging by colleges and universities, Bennett has fastened on tuition increases that outstrip inflation. Yet separate reports recently released by two Washington-based groups representing higher education—the American Council on Education and the National Association of Independent Colleges and Universities—demonstrate that in the 1970s tuition lagged *behind* inflation, and so academic institutions may now be in a "catch-up" phase. Moreover, these studies argue, the basket of goods and services that a college must purchase to stay in business is full of items, including salaries and benefits, books and periodicals, and state-of-the-art scientific equipment that have risen in price faster than most items contained in standard measures of inflation. In fact, over the past five years the Higher Education Price Index developed by the Federal government as a measure of higher-education costs, has increased at an average rate of almost two percent a year above the Consumer Price Index.

New York University Chancellor L. Jay Oliva points out that "it is only inflationary when you charge a higher price for the same product. It is not inflation when you raise the price because you're delivering a better product. At NYU we're providing a constantly improving product for the money."

And certainly the cost of four years of higher education is not the only item, after

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two inflation-drenched decades, that induces sticker shock among consumers; we now pay for automobiles what good-sized houses cost in 1965. Still, college remains an expensive proposition for most American families: the bill for undergraduate education at an independent institution of higher learning can now range from $40,000 to $65,000. Why are the costs of college rising?

Analysts point to several factors. Education is a highly labor-intensive industry, and faculty salaries have been increasing in the last several years. These gains follow dramatic losses when the purchasing power of faculty salaries plummeted by twenty-eight percent between 1973 and 1981. Many schools have also delayed making needed repairs to their physical plants, but can wait no longer. College consumers—the students—must be provided with an increasingly sophisticated array of costly "tools" such as computers, high-powered microscopes, and electronic and engineering equipment that supplement classroom or laboratory instruction.

College officials cite another reason for higher tuitions: the fall-off of Federal student financial aid, which has forced institutions to fill the gap with their own resources. Bennett puts the opposite spin on this, claiming that "increases in financial aid in recent years have enabled colleges and universities blithely to raise their tuitions, confident that Federal loan subsidies would help cushion the increase." However, statistics show that tuition hikes were rather modest when student aid was growing most rapidly from 1970 to 1980, while during the current period of slow growth in student aid, tuitions have climbed.

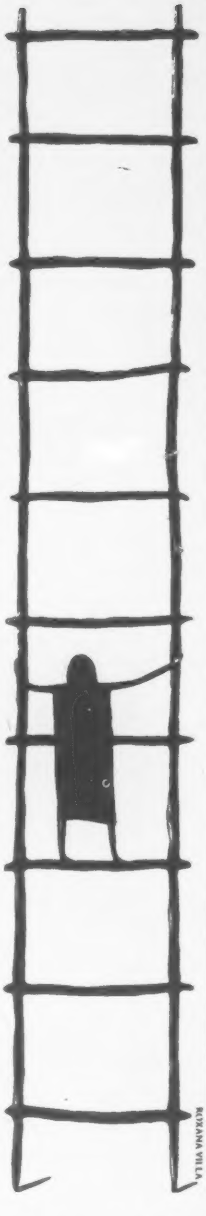
Underlying the debate over cost is the larger question of value: what is a college education worth, and how is it measured? Bennett cautions students and their families to follow the ancient dictum: Let the buyer beware. Higher-education leaders are adding to "caveat emptor," another caveat: a college education is not a quantifiable purchase. The value—and the price—of an educated person are immeasurable. "The danger may be less that universities charge too much than that they charge too little to maintain high quality," says Princeton University president William Bowen.

As the largest private university in the nation, New York University clearly figures in the current debate, and has a stake in its outcome. NYU president John Brademas and Chancellor and Executive Vice President for Academic Affairs L. Jay Oliva recently discussed the issue of college costs in terms of the larger national scene and the institution they know best. To Bennett's criticisms of higher education, headlined "Our Greedy Colleges" in a New York *Times* op-ed article this spring, both men take strong exception.

"Is Bennett correct in calling us 'greedy'?" asks Brademas. "If he means 'greedy' to provide the finest possible education for the people who study here, in that sense, yes, we are! If he means are we 'greedy' to provide our students decent housing; adequate libraries, laboratories, and classrooms; safe, up-to-date athletic and recreational facilities—then, yes, we're 'greedy' for these as well. We also think it's essential that talented but needy students are not for lack of funds denied the chance to study here. During my tenure as president, we've doubled the amount of financial aid to students from University, as distinguished from government, sources. So we're 'greedy' to make it possible for able, motivated men and women to attend NYU. We're also committed to offering proper compensation to the people who teach and work here. We realize that beyond competition for our faculty from the private sector, we also have to keep them from being lured away by richer institutions. So in all these ways, yes, we're 'greedy'. As far as efficient use of money is concerned, I can tell you that since I've been at this University," Brademas says, "our budgets have been balanced every year, which is more than can be said of the Administration Mr. Bennett serves!"

Both Brademas and Oliva fault Bennett for painting the world of higher education with a broad brush, treating all colleges and universities as if they were Harvard, blessed with a fiscal serenity bred of large endowments, wealthy donors, and shrink-resistant applicant pools. "There are some 3,500 postsecondary institutions in this country, and only two hundred of the private ones have endowments that reach even $1 million," explains Brademas. "Moreover," he continues, "a more important statistic in assessing the wealth of a university is its endowment *per student*. And by that measure, even institutions that on the surface have large total endowments, such as NYU, are really not rich at all. In fact, more than one hundred private colleges and universities have per-student endowments *larger* than ours at NYU."

Chancellor Oliva emphasizes that like most colleges and universities, NYU will increase tuition next fall. "There are special costs associated with moving into the first rank of American universities in the space of a single generation," he says. "We are in the process of doing in this generation a long list of things that other schools did a generation ago. We are building dormitories now and, therefore, funding thousands of beds in an era when construction costs are higher. In the last fifteen years, we have built Bobst Library, Tisch



ROXANA VILLA

Hall, Coles Sports and Recreation Center, and the Meyer Hall of Physics. And we're taking on many other major projects to upgrade our computing facilities, science facilities, and classrooms—all to enhance the education we offer our students. We are competing with institutions that made these commitments—and paid the bills for them—a long time ago. We are moving ahead *now*, and we have to pay for it *now*."

Both NYU's President and Chancellor find it ironic that an Administration committed to the virtues of free enterprise and the place of private values in public life should pursue policies that harm private colleges and universities. Oliva observes that, by temperament and practice, universities are just the type of institutions the Reagan Administration should applaud because they are self-regulating and subject to the pressures of a highly competitive marketplace.

"Colleges and universities are among the best self-policing organizations in American society," says Oliva. "We subject ourselves to constant internal review, as well as evaluations by outside accreditation boards and regional and national associations. Philanthropists, foundations, corporations, and alumni don't spend their money blindly or without strings of review attached.

"We put ourselves on the line every semester by saying to our 'customers'—the students and their parents—'Would you like to come here? Would you like to stay here?' Nor will good faculty," he adds, "remain at institutions where the quality of academic life has grown shoddy. And our growing pool of applicants means we must be doing something right. So talk about free enterprise! Colleges and universities are among the best examples of free enterprise in operation."

"Democracy and education support each other in richly symbiotic ways; the former fosters the tolerance without which a pluralistic society would explode; the latter frees the mind, and the heart, of the bounds of rigid ideology."

Brademas also points to the gap between the rhetoric and the reality of the Administration's posture. He recalls being present in May 1981 at the University of Notre Dame when President Reagan declared that it would be a sad day for academic freedom when tax-supported colleges and universities drove out the great independent ones. Yet the policies of the Reagan Administration work severe hardship on private institutions, contends Brademas. "The sharp reductions in student aid, for example, have already caused real pain for students at New York University," Brademas says. "Since Reagan came into office, NYU students have suffered a net loss of forty percent in total dollar volume of Guaranteed Student Loans."

Several provisions of the 1986 Tax Reform Act also harm academic institutions as well as students. Explains Brademas, "The new tax law denies continued deductibility of interest on student loans and imposes new taxes on fellowships and scholarships. Other provisions of the Tax Reform Act will discourage charitable contributions, making it harder for us to raise funds. Still other changes will hit the private sector of higher education with particular force. Especially outrageous as a matter of principle is the effective denial to twenty or so independent research universities, including NYU, of access to tax-exempt financing while continuing such access for public institutions."

Challenges faced by private universities also include a fundamental fact of economic life in the world of higher education. Asks Oliva: "What does it cost to educate someone? It costs no more at a private university than a public one. But in the case of the private institution, more of the cost is borne by the student. At public institutions, the taxpayer picks up a big share of the bill. Bennett ignores this distinction, and lets people think that private education is more costly."

Bennett "may be getting a lot of play in some quarters, but I think it's significant that on Capitol Hill, both Republicans and Democrats are rejecting his proposals," concludes Brademas. "In taking the positions he does, Secretary Bennett betrays an innocence of the complexities of financing American colleges and universities. If Mr. Bennett genuinely understands the real world of American higher education and still makes such assertions, he's not being wholly honest; if he does not understand, he should educate himself."

The great college-cost debate shows no signs of abating. In fact, the controversy is likely to intensify as academic institutions announce new tuition levels for 1987-88, as high-school seniors and their parents pass through the anxious annual ritual of waiting for admissions acceptances from colleges and universities, and as Congress votes on student-aid budgets.

This much is clear: with an aggressive, articulate Secretary of Education hammering away at them, colleges and universities can no longer afford, in the words of New York *Times* education reporter Edward Fiske, to operate "on the premise that the fruits of higher education are self-evident." Leaders of academic institutions, including John Brademas and L. Jay Oliva, agree that costs are climbing, but make the case that higher learning is among the soundest investments a person—and a society—can make. ❦

Lynne P. Brown is Director of the Office of Writing, Research, and Editorial Services at NYU. She collaborated with John Brademas on a forthcoming book, *The Politics of Education: Conflict and Consensus on Capitol Hill.*

Mr. Brademas. One of the reasons is one to which I was referring in responding to Congressman Williams. Namely, we have seen a reduction in the flow of Federal student aid money. When that money goes down, particularly at a university like New York University, which is heavily tuition dependent, we have to increase tuition. We don't enjoy doing that.

Let me explain. New York University's annual budget is over $900 million. Half of that is for the NYU Medical Center, which is composed of the NYU Medicial School, the Rusk Rehabilitation Institute, and the Tisch Hospital. For the other half of the budget we are dependent for 70 percent of our income on tuition and other fees paid by students. Why are we so heavily tuition dependent? Because we do not have a huge endowment per student which can mitigate the reliance on tuition.

We do not enjoy increasing tuition, but if we are to continue to provide education of quality, that is a major source, and that is one reason I work so hard to raise money for NYU. I have to lead the effort to raise for New York University in the year ahead $2 millon every week. It is not surprising that the board of trustees chose a former Member of Congress for the job. We are going to achieve this goal, and we are doing it.

But we are not able to plow all of the money we raise back into endowment. We have to build housing. Congressman Scheuer represents New York City. Congressman Scheuer is very knowledgeable about housing. He knows that housing in New York City, especially in Manhattan, is very expensive. Since I came to New York University in 1981, we have increased the supply of housing from providing for 16 percent of our undergraduates to over 40 percent of our undergraduates. We have expended over $200 million in the last 7 years in building new housing.

This additional housing is in large measure responsible for the fact that we have seen an increase in applications to study at NYU in the last 2 years of 40 percent. So that investment has proved a wise one. We are also increasing the quality of what we offer.

A third concern in addition to the diminution of Federal aid for students and high costs, particularly in an urban university, is that universities are heavily reliant on personnel, and so on salaries. That's where most of the money goes. You can only go so far in a labor-intensive activity like a university. It isn't as if we are producing widgets on an assembly line and we can apply computers or robots and thereby turn out students much more efficiently. The cost of personnel is also one of the reasons that the so-called education cost index is a couple of points higher, my memory tells me, than the Consumer Price Index.

These, Mr. Chairman, are some of the reasons that it is not inexpensive to go to college in the United States.

There is one other observation I cannot resist making. This is the year 1988. Are you paying more for your automobile today than you did 20 years ago? You are paying a lot more. Are you paying more for your house than you did 20 years ago? You are paying a lot more. The cost of living has gone up generally in our society. I would conclude by saying, as Congressman Scheuer suggested in his opening remarks, that an investment in education is the best investment you can make even from an economic point of view.

So those are some of the reasons, Congresswoman Snowe.

Representative **Snowe**. I would like to ask one additional question. How do we address the issue of the default rate which represents almost 46 percent of the guaranteed student loan program cost?

Representative **Scheuer**. And when you address that will you give us an explanation as best you can as to why we have such a default rate? What is there about the process or about the formula of the student borrowing money to pay for his education?

Mr. **Brademas**. This is a complex issue. I will make a couple of observations. I would be glad to submit in writing, Congresswoman Snowe, a statement that gives you some more observations.

Representative **Scheuer**. We would appreciate it if you would.

Mr. **Brademas**. I shall.

[The following information was subsequently supplied for the record:]

Observations on the Student Loan Default Problem

Supplementary material submitted by Dr. John Brademas to accompany his testimony on December 14, 1988 before the Joint Economic Committee's Subcommittee on Education and Health

The Nature and Scope of the Problem:

Most of the debate over defaults on student loans centers on the Guaranteed Student Loan (GSL) program, now known as the Stafford Student Loan Program.

The following points should be kept in mind about GSL defaults:

- o Although the volume of dollars in default for GSL loans has jumped significantly over the past several years, the actual default rate has not risen dramatically.

So while Federal payments for GSL defaults rose from $235 million in 1979 to $1.6 billion in 1987, the total default rate has remained relatively stable -- in the 11-12 percent range.

- o The increase in default costs should be put in the perspective of the tremendous growth in total loan volume for the GSL program, from $3 billion in 1979 to over $9 billion in 1988.
- o The default rate for the GSL program is lower than the default rates for many other Federal loan programs, such as Small Business Administration loans and farm relief loans.

Reasons for the Default Rate

First, it is not possible to make meaningful comparisons between guaranteed student loans and commercial bank loans and, therefore, between the default rates on the two types of loans. For example:

- o Guaranteed student loans are provided by intent to persons of modest economic means, who often have no credit records or earnings history. Banks would not make unsecured loans to such persons.
- o Accounting rules for classification of defaults on guaranteed student loans are significantly different from rules for commercial loans. In computing their loan default rates, banks are allowed, after a certain period, to write off old bad debts and subtract them from their reported default rates. Figures for government student loan defaults, on the other hand, are cumulative over the entire life of the program, with no loans written off as bad debts. Understandably, the student loan default rate appears larger by comparison.

Another significant point: The GSL program has shifted away from its original purposes, thereby adding to the default problem.

Intended as a low-interest, deferred payment plan for students from middle-income families, GSL has also become the primary Federal program for helping low-income students pay for college. This shift toward encouraging students from low-income families to borrow is directly related, in turn, to the decline in Federal support for grants (Pell Grants) to needy students.

Third, data show that a substantial volume of GSL defaults occurs among students enrolled at profit-making trade schools. Latest figures reveal that students at proprietary schools now constitute 35 percent of all borrowers of guaranteed student loans.

Steps to Reduce the Default Rate

- Provide adequate Pell Grant assistance to students from low-income families so that they will not be forced into heavy borrowing.
- Explore new risk-sharing mechanisms to give lenders added incentives to avoid defaults and improve collection.
- Ensure that students have adequate counseling, from both lending institutions and colleges and universities, at the time they take out loans in order fully to understand their obligation to repay those loans.
- Review the current operation of aid programs for students in proprietary schools. At a minimum, stricter requirements are needed to ensure adequate occupational counseling and career assistance for borrowers.

Mr. **Brademas**. The greater the extent to which we rely on loans as distinguished from grants, by definition you are going to have an increase in default rates because there is obviously a greater opportunity to default on loans than, in the nature of the stipend, on grants. We already know from analysis that low-income family students, particularly minority students, are high-risk students. Many low-income minority families are not accustomed to borrowing. It is not part of their culture.

If you want universities sharply to reduce default rates, universities can do so by saying, well, we simply are not going to invite as many low-income minority students to come study at our place and thereby we are going to diminish the risk and we won't have so high a default rate.

I would also point out that universities themselves are not the ones that make the loans. It is the banks and credit unions that chiefly make the loans. I think there is a misunderstanding on the part of some who think that colleges and universities are somehow in the business of making loans. We are not. We are not well equipped to do that.

There is, however, a role for colleges and universities that is a positive one, and that is to do more counseling, to work more closely with students, to encourage students, to help students who may be at risk understand their obligation to repay those loans.

I'm a Calvinist when it comes to this matter. I believe that if you make a contract to borrow money you have a moral obligation to pay that loan back.

As one who helped write these student aid programs all those years ago, I feel all the more deeply about the importance of bringing down the default rates because I am well aware, given your situation as elected Members of Congress, that the greater the extent to which there is a default problem, the more public support for the entire fabric of student aid programs will be eroded.

I will make one other point. This is not by way of justifying the default rate, because I have already said that I don't think defaults are justifiable in any respect. As a society we pay particular attention to default rates when it comes to loans to college students. This is the way it has been from the time I first became a Member of Congress.

We don't say very much when the General Accounting Office issues reports on incredible cost overruns when it comes to defense contracting. Maybe on one contract we could take care of all the student loan defaults in the country for some period of time.

My point here is simply that we single out students rather than farmers, small businessmen, veterans, and defense contractors who may get into trouble with government loans.

Having said that, I want to make very clear that I am not interested in special pleading for colleges and universities. People, including students, should pay their loans. The extent to which persons who have my kind of responsibility can help bring student default rates down, believe me, I think we should.

Representative **Williams**. Congresswoman Snowe, would you yield?

Representative **Snowe**. I would be glad to yield.

Representative **Williams**. To ensure that the discussion about student loan defaults is in its proper perspective, I just want to mention that we always use the term "default rates" when discussing this matter. If we are going to use that term, then we ought to understand that the default rate is not high; it is the volume of dollars in default that is high and growing.

Most of you don't need an explanation for that, but for those millions of Americans who are going to read the transcript of this hearing, let me explain.

Last year 3½ million college students took out a government guaranteed loan. Uncollaterilized. When I say to bankers what is your rate of return on uncollateralized loans to low-income people, they say, we don't make such loans.

Well, we do. We guarantee their making that loan. So we are in that business federally. The astonishing thing is that every year 90 percent of those students, and in most years in excess of 90 percent of those students, will pay back those loans. So it is not the default rate that is high. The default rate is astonishingly low. It is the accumulation of the unpaid debts through the years that has grown to a size that is now unreasonable.

Congresswoman Snowe is correct. Almost half of the Federal dollars that we now spend on guaranteed student loans are used to just pay off the volume of dollars in default. But the rate itself, I think, remains very reasonable.

Thank you for yielding, Congresswoman Snowe.

Representative **Snowe**. Thank you, Mr. Chairman.

Representative **Scheuer**. Congresswoman-elect Nita Lowey, why don't you make your opening statement and then ask any questions that come to mind.

OPENING STATEMENT OF REPRESENTATIVE-ELECT LOWEY

Representative **Lowey**. Thank you, Mr. Chairman.

I would like to thank the chairman and all of my new colleagues for giving me this opportunity to address the crucial issue of improving the quality of education in the United States.

Throughout my campaign for Congress, I stressed the importance of improving our Nation's schools. Moreover, I pointed out that there is an intimate connection between our declining competitiveness and our failure to provide first-rate education and training programs.

While I was making these points on the campaign trail, Chairman Scheuer and the other members of the subcommittee were creating an extensive hearing record that clearly outlined the extent of the economic crisis that we will face if we do not improve our educational programs immediately.

In fact, the subcommittee today released a report that summarizes the findings of 9 days of hearings late last year entitled "Competitiveness and the Quality of the American Work Force." The report convincingly demonstrates that America cannot remain competitive in the world economy without an adequately educated and trained work force, and the report contains specific recommendations for improvements that I am proud to endorse.

Today the subcommittee will focus on the issue of access to both preschool and postsecondary education. I strongly share the concern of the members of the subcommittee that universal access is a necessity if we hope to increase the skills of American workers and restore American competitiveness abroad.

As an official in the New York Department of State, I was involved in both preschool and postsecondary programs. When I served as deputy director of the New York Division of Economic Opportunity, I was involved in evaluating and approving the Head Start program.

This program, more than any other, represents solid and absolute proof that preschool education is of significant benefit to the at-risk populations in our schools. However, only one out of five children eligible for Head Start is actually participating in the program.

Our failure to provide adequate preschool education programs is a national tragedy that should be corrected immediately.

In addition, I was a strong supporter of Governor Cuomo's innovative Liberty Scholarship program which guarantees to any seventh grader who is qualified from a low-income family a college education upon graduation from high school.

I strongly believe that the Federal Government has a role to play in improving access to postsecondary education and I am eager to use the successful New York model in crafting a nationwide strategy to address this problem.

I do not believe we can stand by at a time when the United States is falling behind its competitors in combating illiteracy, in improving school achievement, and in providing effective job training. Rather, we must devise and implement strategies right now to reverse this dangerous trend.

Mr. Chairman, I thank you for permitting me this opportunity and I look forward to continuing to listen to the rest of the testimony.

Mr. Brademas, I do have a question concerning the Liberty Scholarship program. I would appreciate your comments on it. Do you think it is feasible, do you think it will work in New York, and do you think it can be replicated throughout the Nation?

Mr. **Brademas**. I think it is a highly imaginative and creative enterprise created, as you know, by Eugene Lang, an outstanding New York businessman.

I will make two points about it.

First, you spoke of the Liberty Scholarship program. There is another part of Governor Cuomo's program called the Liberty Partnership program. In fact, it was mentioned in the New York Times this morning, I think. Let me tell you where the Liberty Partnership program came from.

I spoke 2 or 3 years ago to then-New York State Assembly Speaker Stanley Fink. I have great respect for Speakers, by the way. As a Member of the House of Representatives, I was brought up that way. I said, "Mr. Speaker, we are in desperate straits in the State of New York for help from the New York State government for graduate education."

He said, "Mr. President, you have your problems; I have my problems. I'm worried about high school dropouts. See what you can come up with to help meet both problems."

And so we sat down and worked out a program whereby the State of New York provides stipends to graduate students in some dozen public and private universities, principally in urban areas, so that those graduate students can mentor at-risk high school students to help them stay in school. The program has worked marvelously well and it saves the State taxpayer money because you don't have these kids dropping out of school and they have a better shot to pursue postsecondary education.

More broadly, however, Mrs. Lowey, let me observe that I think it would be a mistake to assert that the Liberty Scholarship/Liberty Partnership programs would in and of themselves make a substantial impact on the problem of assuring access to disadvantaged young people to complete grade school and high school. I think it would be wrong to suggest that such a program could replace existing student assistance programs in the United States. I think it should be regarded as a supplement, a creative one.

We have testifying here this morning, in my judgment, along with Gene Lang, as a champion of education, the most articulate and effective business leader in New York City whom I have heard, William Woodside, who understands the importance of business executives in urging government leaders to support education as distinguished from relying solely on private sector support for our schools. He understands that point in a very sophisticated way. I am sure Woodside's testimony won't betray my confidence in him.

I would like to make one other point, because I am seated alongside Jule Sugarman.

I was very touched, Mrs. Lowey, by your strong support for Head Start. Twenty years or so ago, Jule Sugarman and I worked closely with a young Senator from Minnesota named Mondale. Senator Mondale and I wrote the Comprehensive Child Development bill. Unfortunately, although Congress passed it, the then-President of the United States, a man named Nixon, who was from California, vetoed it with an outrageous veto message.

I find it fascinating that 20 years later even Republicans are coming around to understand the importance of early childhood development, and George Bush, our new President, during his campaign, to his credit, spoke of the importance of Head Start and children's health.

Mr. Chairman, it takes time for these matters to come to maturity. I think I may say that Congressman Jim Scheuer and I served in Congress long enough to have seen how ideas that were planted years ago finally have taken root and are flowering.

Mrs. Lowey, I would just say that aside from being a university president, you have the greatest job in the country.

Representative Lowey. Thank you very much.

I just returned from Harvard, a school which you seem to know very well, and we all agree that Head Start and postsecondary education should be a priority. I think our major problem and our major task is how do we fund these programs. That is what we are all going to figure out together.

Mr. BRADEMAS. I am glad you had your undergraduate education at Harvard. Now you must come to NYU for your graduate education.

Representative SCHEUER. She is coming to Congress for her graduate education.

President Brademas, you have discussed the importance of Head Start. You were a powerful supporter of Head Start in 1965 when you wrote the Elementary and Secondary Education Act. You have indicated some of the unhappiness that you have about the trend toward a lower level of grants and higher level of loans. Grants that used to be 80 percent are now down to 50 percent.

You have indicated that you believe loans, at least to the low income and especially the low-income minority population, are a bit of a turnoff. They don't understand them; they are fearsome about them. Their parents have a lot of reservations about big loans. It's not part of their culture, as you said.

So it is a turnoff to the low-income population of kids that we urgently need to get educated. When we have a high default rate it is also a turnoff to society. It is very unfair. Society doesn't think about the defense contractors, which you talked about, but it does have a way of demagoguing a student default rate that seems high.

If you have all of these problems with student loans and you seem to feel that access to postsecondary education is terribly important and access to preschool education is terribly important, why don't you think that it is time to bite the bullet? As the Truman Commission said 41 years ago, the time has come to make education through the 14th grade—and that could be 16th grade—available in the same way that high school education is now available.

I feel like the kid who is looking at the king on horseback and he is saying, but the king is naked. Why don't we take the scales off our eyes and do what this society seems to want to do, which is provide assured access both to preschool and to postsecondary education?

Mr. BRADEMAS. I have tried to indicate in my testimony my strong support for the bipartisan tradition of support of education, especially higher education, in the United States. I must now in light of your question make an observation that could be taken as partisan, but I don't really think it should be. The issue has to do with the budget deficit.

We are experiencing a grave challenge to the future strength of our country, to the capacity of our country to respond to a whole range of issues. You included some of them in your opening statement when you talked about the problems of drug and alcohol abuse, for example. I was chairman of the subcommittee and I managed on the floor of the House to successful passage the Drug and Alcohol Abuse Education Act when Richard Nixon was President of the United States. Some of us have been working at this matter for a long time. You were there, Jim.

Representative SCHEUER. Yes.

Mr. BRADEMAS. And we still have those problems. We didn't put much money into those particular programs.

It seems to me therefore that if we are effectively going to come to grips with a whole range of major issues facing our country, such as, for example, the challenge of AIDS—you are going to hear from a distinguished leader in that struggle, from Admiral Watkins, in a moment—we have to get this budget deficit under control. I, therefore, must say that I think the major issue with which you are going to be wrestling in this city in the next year is controlling the deficit, and the heart of that question is, how do you do it?

The budget deficit has been a problem ever since Mr. Reagan first came into office and won support for a huge reduction in Federal revenues as a result of the change in the tax laws and huge increases in spending for defense. A predictable result of these two actions, so at least it seemed to me, to any rational person—but I understand that doesn't always hold true in our Nation's Capital, which I love—was huge deficits. Until we get these deficits under control, we are going to have a hard time providing the kind of resources we need for Head Start, for preschool education, for postsecondary education.

What to do about it? Here are my remedies, for whatever they are worth. I have been saying this for several years now, so it is not new, and I make these points in no order of priority. I think they are all indispensable.

First, we have to slow down the rate of increase in defense spending, make tough choices. Second, we have to raise tax revenues. Third, we have to look with great care at some of the entitlement programs and say this one we can continue to support, this one may have to be modified, this one may have to be amended. And you have to act on all three of these fronts.

I think the President of the United States should say—and so far he has not indicated that he is willing to do so—"ladies and gentlemen of the Congress, this is a bottle of castor oil. I don't like it and you are not going to like it, but we all have to drink it and we have to drink it together."

For if Mr. Bush comes to Capitol Hill and says to all of you, "I want to keep up defense spending. In fact, I want to increase defense spending. I don't want any new tax revenues, no new taxes. Read my lips. The only way you are going to solve the deficit problem is to cut more out of the domestic programs like education," increases for which he has campaigned, as he has also spoken about the importance of environmental protection—both of which will cost more resources—then you are going to have gridlock in this city. You are going to have gridlock, and it is going to be a profoundly damaging development for the future strength and security of the United States and we are going to become far more dependent even than we are today on the Japanese and others who pay the loans on our credit cards.

Representative SCHEUER. That assumes that the Japanese are prepared to permit us to be far more dependent than we are today, and that is not all clear.

Mr. BRADEMAS. I agree with you, Mr. Chairman.

I am morally sympathetic with the thrust of your question that we should expand opportunities for preschool child development, for study through grade school and high school, and for education at the postsecondary level. But I live in a real world. We all live in a real world. There is no cornucopia out there. That is why you are now having to face hard choices.

I simply hope that when the President-elect of the United States comes into office next month, he will face up to hard choices. I believe that if he is willing to say—this is the art of politics, not the science of it—"I've taken another look at the little old document called the budget and it somehow doesn't seem to work out, and so, ladies and gentlemen, come let us reason together," as President Johnson would say, then I think we can come to grips with this problem.

If I were he, I would listen to people like Bob Dole, the distinguished minority leader of the Senate, who can count. Indeed, we need some basic arithmetic if we are going to deal with these problems, some courses in basic arithmetic, and the courses should be offered by tutors, if necessary, at 1600 Pennsylvania Avenue next month.

Representative SCHEUER. I have confidence in George Bush's basic integrity and decency.

Mr. BRADEMAS. He's a very decent man.

Representative SCHEUER. Yes. I knew him when he was in Congress two decades ago, and so did you.

He is a committed man, too, and I think he is going to want to be the environment President and I think he is going to want to be the education President, and I think he is going to understand that the country needs to get over the hump of a candidate who may have been saying "read my lips" but who as a President feels a moral as well as a political compulsion to do the right thing for his country. The right thing for his country is to make some investments at this time. Not expenditures, but investments in our human capital.

Getting this budget under control is not going to be done in an instant; it is going to be done over a period of years. I can't think of anything that would contribute more to getting our financial house in order than producing an educated citizenry, an educated, productive, skilled citizenry that will make us competitive once again in a way that we are not at the present time.

Mr. BRADEMAS. Mr. Chairman, I will conclude, because I have taken too long now. The quotation that for me sums it all up was from a great philosopher, Alfred North Whitehead, who once said, "In the conditions of modern life the rule is absolute. The race that does not value trained intelligence is doomed." I don't believe the American race is doomed if we have the wit and the will to provide the resources to assure an adequate supply of educated men and women.

Representative SCHEUER. We can agree on that fine closing sentence to your outstandingly fine statement. Thank you very, very much.

Mr. BRADEMAS. Thank you, Mr. Chairman.

Representative SCHEUER. Governor, Congresswoman Olympia Snowe was very keen to introduce you, but unfortunately she had a prior appointment with Department of State Secretary-designate Baker and she had to leave. So let me substitute for her.

Governor McKernan is a former Member of Congress. He served two terms on the Education and Labor Committee. He is chairman of the Telecommunications Subcommittee of the National Governors' Association. He has perhaps been one of the outstanding Governors in the country in assuring access both to preschool and to postsecondary education.

We are delighted to have you, Governor. Tell us about what you are doing.

STATEMENT OF HON. JOHN R. McKERNAN, GOVERNOR, STATE OF MAINE

Governor McKERNAN. Thank you, Mr. Chairman. Having served on your side of the panel for 4 years, I would ask that I be allowed to submit my prepared statement and to summarize it.

Representative SCHEUER. Without objection, it is so ordered.

Governor McKERNAN. I am sort of having a hard time deciding where to begin.

Representative SCHEUER. Tell us about your scholarship program.

Governor McKERNAN. I will. That is my reaction to President Brademas and the discussion which took place on whether or not any of you here in Washington can read the President-elect's lips.

I think what I would like to do is just talk a little bit about what is happening in the States. Because I think it is important for you all to hear that and realize that there are a lot of things happening outside the city of Washington.

I want to commend you, Mr. Chairman, for the indepth series of hearings and the report which you have issued, which I think is going to go a long way toward forming the debate that has to take place in this country.

The question is going to be, in my view, How we are going to address the problems and whether or not we truly are going to have dollars at the Federal level that are going to do the many things that you would like to do and that I think a lot of us would like to do?

My feeling is that my eyesight is pretty good and I can read the President-elect's lips, and Congress is going to have to realize that it is not going to have significant additional new dollars with which to accomplish many of the things that I think we want to do, and it is time to get creative and look at how we can form the right kind of partnerships to accomplish what have to be the goals of this country.

In the past 2 years in our administration in Maine, we have done a number of things. In 1987 we had the largest percentage increase in State funding of local elementary and secondary education.

In the last 2 years we have had the largest percentage increase in State funding for our university system of any State in the country.

We have implemented a creative telecommunications system of interactive television to bring education to many of the rural parts of our State so that people, wherever their geographic location happens to be, have access to the kind of programs that are necessary for them to get the skills they need and to have the opportunity we hope to bring to our State.

We have also embarked on child care, education and training programs, and welfare reform to make sure that people who need additional skills have the opportunity to get them.

Having served on the Postsecondary Education Subcommittee when I was in Congress, I would like to talk a little bit about the postsecondary aspect. I do believe that Federal higher education dollars are absolutely essential to accomplishing what we want for opportunities for people in this country.

Frankly, there are people who are falling through the cracks. What we are trying to do in Maine is to begin to try to fill those cracks. We are doing it with a two-pronged approach that we will be proposing to the next session of the legislature which is going to guarantee to every qualified student in our State that we will find the financing, some of it grant, some of it loan, to make sure that every student in our State who is qualified to go on to postsecondary education has the financial opportunity to do that.

We are going to do it, as I said, with two prongs.

One is to increase our grant under the State Student Incentive grants which we think are absolutely essential to reducing the high indebtedness we are now starting to see through the excess of loan programs that President Brademas talked about compared to grant programs.

We are also moving all of our postsecondary education funding programs into one agency for one-stop shopping. We are going to do that in a way that will allow us to counsel students on a regional basis so they know what is available.

We are convinced that through coordination, through consolidation of programs, and through counseling we can get to students and continue our program of increasing their aspirations. We tell students in our State to dream big dreams. The problem is that too often those dreams are deferred because they don't have the finances available to get the education they need to achieve those dreams.

We think that in our State, where we have one of the highest high school graduation rates of any State in the country but one of the lowest percentages of students who go on to postsecondary education, that it is absolutely essential to address the aspirations issue and then the financing issue because we have to make sure that students can implement their dreams.

I talked to Secretary-designate Cavazos recently about four changes that I would like to suggest to your subcommittee that I think can be made in the way we fund higher education. They are changes that will pale in comparison to some of the suggestions that you are making, Mr. Chairman, but they are also some which I think upon reflection you will realize perhaps are at least the first step that we can take in these tight budget times.

First, I think that we ought to be having a matching grant program for counseling students. We are going to implement this on our own in Maine. I think if there were a matching grant program at the Federal level that other States would do the same thing. There are a few States that do it now. They have found a significant increase in knowledge among students once they have done the counseling about the kind of financing that is available and it has in fact increased the number of students going on to postsecondary education.

We are also going to triple the amount of State funds going into the Student Incentive Grant program because we feel that the high indebtedness is a problem that we have to look at.

We are also going to implement a loan program of last resort. What that would mean is that we would have a program where we would be able to say to all students that we intend to make sure you have the finances; if all the other programs together leave you with an unmet need, we will in fact be there to take care of that unmet need with some type of program. That, I think, gets away from the financing issue and allows children to concentrate on what their goals are and how they are going to get there.

Finally, let me conclude by saying the tax-exempt financing issue on these loan programs is essential. I hope that you in Congress will do everything possible to make sure that the tax-exempt financing is allowed to continue.

There are some in the last administration, in the Education Department and Treasury Department, who have thought that we ought to do away with tax-exempt financing. The extra cost of borrowing for lenders in the taxable market compared to the shrinking spread that they are being allowed under the program is going to mean that fewer and fewer lenders will participate if we don't allow that market to continue.

We can live under the caps that were passed under the 1986 Tax Reform Act; we can't live with the taxable financing and still have the kind of expansion of programs that we think are necessary.

Mr. Chairman, I have elaborated on these types of changes in my prepared statement. They cost probably under $200 million but they could result in well over $2 billion in additional funds available to needy students to make sure that they have the opportunity that I think all of us in public life want to have for them.

Thank you for letting me be a part of the program.

[The prepared statement of Governor McKernan follows:]

PREPARED STATEMENT OF HON. JOHN R. McKERNAN

I want to thank you for inviting me to testify before the Subcommittee this morning. Having sat on your side of the table for four years, I know that good testimony is brief testimony, so I will try to stay within Representative Scheuer's five-minute time limit. That will not, however, be easy, for this Subcommittee is concerned with a number of issues critical to this nation's future. In fact, I want to commend all of you for acknowledging the tremendous importance of educational access to this nation's future and to our ability to provide greater opportunity for all of our citizens.

I hope you are all aware that states, too, have begun to acknowledge, as never before, the need to increase educational access for their citizens; access at all levels -- preschool through post secondary -- and for all ages -- not just for those who are between 5 and 22.

In Maine in the past two years alone, we have made major new investments in our education systems:

-in 1987, we increased by more than any state in the nation, funding for local education

-for the past two years we have led the nation in the percentage increase of state funding to our university system

-we have created an interactive television system that is connecting high schools all over Maine with the university system, greatly increasing educational access for our widely dispersed population.

-we have dramatically increased funding for child care, allowing us to increase the number of state-subsidized slots, raise salaries for child care providers, and encourage private sector programs

-and by focusing state resources and attention on the need for job training and retraining programs, Maine is leading the nation in the effort to provide increased educational opportunities and options for our citizens

I could go on at great length about the need for such investments, about the increasing competition our nation and our people face, about the critical importance of investing in our children and our workers. But as our time is limited, I want to focus on access to higher education, and to suggest -- from my vantage point as a Governor and former member of the House Education and Labor Committee's Subcommittee on Post Secondary Education -- ways that both the states and the federal government can ensure that where there's a will and a desire for education, there's a way to finance it.

During the time I served on the Subcommittee, we oversaw the reauthorization of the Higher Education Act of 1965 and, hence, the continuation of the Guaranteed Student Loan Program and Pell Grants. Those programs have provided the needed resources for millions of Americans to pursue higher education. But those programs have not kept pace with increases in educational costs. In fact, the total number of federal financial aid dollars coming into Maine in recent years has declined. At a time when our nation's economy is requiring more college graduates than ever before, the federal government has failed to ensure that access to higher education is a possibility for all of our citizens.

In short, people are falling through the cracks of our financial aid programs.

In order to fill those cracks, we in Maine are building a program that -- using federal and state resources -- will guarantee to our citizens that no academically eligible student is denied the opportunity to obtain a postsecondary education because of 1) a lack of knowledge of career opportunities and educational programs, 2) a lack of information about financial aid resources, and 3), and most importantly, a lack of money.

The program will allow us to do two very important things. One, it will increase substantially state-funded grants and loans to our students; and two, it will allow us to bring all of the present aid programs -- federal and state -- under one roof. We like to think of it as one-stop shopping. Financial aid counseling is made easier with the creation of one statewide source of information, and the cracks are filled; if one program doesn't meet a family's need, we'll make sure there is one that does.

Such coordination, consolidation, and counseling will provide our state with a vastly improved method of ensuring that students take full advantage of existing aid programs. While such steps are critical to our ability to guarantee our citizens the financial resources they need, so, too, of course, are strong, well-funded grant and loan programs. I'd like to take just a minute to tell you about several of Maine's promising new initiatives.

Last April we created the Maine Educational Loan Authority to offer families and students an affordable way to finance higher education. MELA Loans, as we call them, are privately guaranteed. They are intended to supplement government-sponsored financial assistance and campus-based aid and to serve middle income families who are eligible for virtually no federal or state aid programs. Qualified applicants may borrow from $2,000 to $20,000 a year, up to the cost of education. Loan approval is based on credit worthiness.

This year, we intend to take MELA one important step further. Because there are still isolated instances in which a student earns too much to receive a Stafford Loan and does not qualify for a MELA, we intend to create, within the Authority, a loan program of last resort, one that will allow us to say very clearly to all of our citizens that no academically eligible student will be denied a college education solely due to lack of adequate financial resources. It is a guarantee I believe we must make if we are serious about raising the aspirations of our young people and giving them greater opportunities and options in their lives.

In addition, we will ask the Legislature to increase significantly state support for Maine's Student Incentive Scholarship Program so that we can provide grants to all qualified applicants -- not the 59 percent we presently serve -- and increase substantially individual awards. By doing so, we hope to decrease both the amount of indebtedness carried by our students and the rate of default.

Maine has not, as I think these investments show, shirked its responsibilities to our students. We are more than willing to share the risks with families and the federal government.

With only 14 percent of our state's population holding a 4-year college degree, we know that we must make it possible for more of our citizens to enroll in higher education -- whether on a part-time or full-time basis. And we know that, often, the GSL limits of $2,625 for the first two years do not begin to meet individual needs. But in an era when more jobs than ever before require at least sixteen years of schooling, when more and more workers find it necessary to go back to school to learn new skills, states, on their own, cannot meet the full need.

On Monday, I met with Education Secretary Cavazos to discuss with him ways in which the Federal Government might more effectively assist our nation's students and fill some of the cracks that presently exist in state and federal programs.

I suggested to him that the federal government provide incentives for states to create programs -- like Maine's proposed one -- that both increase counseling programs and guarantee the availability of academic loans to eligible students.

In developing our new programs, we have talked with educators, lenders, and families about the strengths and weaknesses of our present system. All of them told us the same thing: that we need more financial aid counseling and coordination. In many instances, the aid programs exist and the resources are available, but students and their families are either unaware of the resources or unable to sort through the myriad of federal and state programs.

Consequently, as we increase funding to our state loan and grant programs, we will also increase -- at no great cost -- our counseling efforts. I suggested to Secretary Cavazos that the federal government encourage all states, through a matching grant program, to increase counseling efforts. We are convinced in Maine that any additional expense would be greatly offset by reductions in default rates.

I also suggested to the Secretary one effective and relatively inexpensive way in which the federal government could work in partnership with the states to ensure that no eligible student is denied access to higher education because of a lack of financial resources. If Washington would help by partially reinsuring the default on state supplemental loan programs, states could float the necessary bonds with the assurance that the federal government would assume some of the risk. The cost of such a program in Maine would be minimal based on our state's low default history and the credit worthy aspect of our loans.

In addition to our loan programs, we need to find ways to increase the amount of federal and state dollars available for grants. The federal government currently provides the State Student Incentive Grant Program (SSIGP) which makes some funds available to the states to assist us in providing grants to eligible students attending institutions of higher education. I am encouraging the department to expand this program. We believe states will expand considerably the programs they offer with some increased federal support.

Finally, I want to stress to all of you -- as I did with Secretary Cavazos -- that the most important thing the federal government can do for higher education is to resist further attacks on Maine's ability to do tax exempt financing. We can live with the state caps placed on us and the restrictions of the 1986 tax code changes. But further detrimental action will be devastating. Our secondary market recycles Stafford, PLUS, and SLS loans with these funds, and we also use them to make supplemental loans available. Tax exempt financing is a wise and cost effective use of government resources.

As tuition, room, and board continue to rise dramatically so, too, I think, does the perception that a good education is beyond the means of a great many of our people, and that is a perception that this nation, this land of opportunity, cannot afford -- literally or figuratively -- to allow to persist. By creating a federal/state partnership that, among other things, guarantees the availability of financial aid, we send a clear message that this nation values education and believes in the promise and potential of each of our citizens.

In closing, I want to thank the subcommittee for taking so seriously the critical connection between educational excellence and economic prosperity. I want to encourage you and the Education and Labor Committee to continue to push for programs and policies -- at both the federal and state level -- that will open the doors of higher education and opportunity to more of our people.

Representative **Scheuer**. Thank you very much for coming down here to testify and telling us about your experience. We are very grateful to you.

You are quite right. If we do go to this business of extending public education, it will have to be phased in over a period of years. It cannot be done overnight. But the logic of it seems to stand.

I notice that in your prepared statement you state:

> That we need more financial aid counseling and coordination. In many instances, the aid programs exist and the resources are available, but students and their families are either unaware of the resources or unable to sort through the myriad of Federal and State programs.

I must say from my own knowledge that is a masterpiece of understatement. The array of different Federal and State aid programs is absolutely mind blowing; it's dazzling. We have this impressive bureaucracy of people who are trying to explain it, trying to interpret, trying to help kids and their parents find their way through the labyrinth, and it isn't very successful.

We have heard from Mr. Brademas that especially for low-income minority kids taking on these enormous loans early in life before even the beginning of their careers can be a daunting phenomenon. It's a turnoff for a lot of kids—not only the low income.

You talk about the myriad of programs and indicate that we need more counselors and more information to guide people through the maze, and you say that in the ultimate instance we are going to provide the money for you to do it anyway. Wouldn't it therefore be a lot simpler and wouldn't it be intellectually clearer for our country to say we are going to extend public education?

You are saying any kid that needs it is going to get it. Why don't we make a simple declaratory statement that public education through college is a given?

We started out with public education, K through 12, in 1910. Then the Truman Commission came along 40 years after that, in 1947, and said that we should extend that through 2 years of college, treating it just the way we treat high school.

Now, 41 years after the Truman recommendation, which got very little notice and absolutely no debate—we are suggesting today that we build on what Truman was suggesting 40 years ago; we think public entitlement ought to be for another 4 years of public education after high school. Then we can get rid of this nightmare of aid programs that it takes a skilled professional to understand and relate to and interpret to the kids and their parents.

Wouldn't it be more intellectually honest of us to say that we are to establish education as a top priority? That based on the three-quarters of a century that has taken place since 1910 we have decided to extend public education down 2 years to ensure an enriched Head Start experience for every kid who needs it—not just the ones who don't need it, as is the case now. And we are going to extend public education up to 4 years—not just because the kids need it, but because our society needs it.

The pain and the cost in our society is such that we simply cannot afford not to do that. As a financial matter, if the model that we are referring to—GI bill of rights—indicates that the Government gets back at a minimum between $5 and $12 for every dollar it expended assuring postsecondary access for GI's, how can we afford not to make that investment?

And isn't it more honest simply to say we are extending the system 4 years and you can forget all of this nightmare, this morass, this swamp of different competing programs and just assume when you come to the schoolhouse door at age 3 you are going to have a ticket to education through elementary school, through secondary school, and through college, and that we are doing so because we need it as a society?

Governor McKernan. I think your suggestion is one that obviously merits continued discussion. It seems to me to fall into the category, however, of universal health coverage. The same type of issue which the new Senate majority leader from our State, Senator Mitchell, recently responded in response to a question about universal health care:

> I don't even address those issues because I try to deal in the realm of the attainable and it is not going to happen.

I guess that is sort of my reaction to your suggestion. I am not sure that at this point this country is prepared to have taxpayers, people who are earning $15,000 or $20,000 a year, having their taxes go to finance the college costs of the richest in this country. I think that we now have a program which tries to identify those people for whom access is a problem.

I think we would be better served, especially in the short run, perhaps discussing the larger issue of where we ought to be going as a nation in the long run on education. We have to be discussing in the short run how we are going to make sure that those people who are falling through the cracks and for whom access really is a problem receive their education.

Representative Scheuer. It might be that access to the 4 years of postsecondary education might be means tested. That certainly is a possibility. Again, if you means test it, that would be one barrier, but we still would be getting away from this nightmare of a wide variety of programs that very few people understand even when they study them.

Let me make a point about your illusion to our health care system, that we can't afford universal access to health care. Governor, we have it right now. We have universal access to health care. But it isn't very well thought through and it isn't very efficient.

When poor people who do not have health insurance, who can't afford a doctor, get sick they go to the hospital emergency room, and the hospital emergency room across the length and breadth of the United States has become the family doctor.

That is a damn poor way of setting up universal access to a health care system. It uses scarce resources in a very inefficient way. We could do a heck of a lot better if we decided to bite the bullet and move into a national health care system that was well planned and tightly administered.

This same JEC Subcommittee that I chair held hearings about a year ago on what is wrong with our health care system. Joe Califano, the former Secretary of HHS, indicated that we are wasting about $125 billion a year because of the rather unplanned, chaotic, ill-thought through nonsystem that we have as our health care system. This is a perfect example of it. You know perfectly well that there isn't any place in the United States—I hope there isn't—where a poor person if they are sick can't go to get help. It's the hospital emergency room. That is an unplanned, wasteful, highly cost-ineffective way of producing health care.

Maybe we have the same thing with our education system. And one wonders why we have to go through all these convolutions that you are talking about—these myriad of programs which require counselors to interpret them, a loan program with a high-default rate, a loan program that turns off a lot of the kids that we most urgently want to include in our postsecondary system. This raises questions that we are not going to solve today.

Governor McKERNAN. I would like to make two points. One to clarify the record. I did not say that we should not have universal access to health care. I said the whole issue of universal health care coverage is something which at this point this country is not going to be able to afford. I heartily concur that if you look at almost every State in the Nation, we are struggling with the increased cost of health care and the whole issue of access to health care.

I think it is also important to realize that we can do better with what we now have. That ought to be our short-term goal, making sure that we do have adequate access either to health care or to postsecondary education, which is why we are here, to look at the myriad of programs and find a way to consolidate those and to make sure that people do understand what is available so that we maximize those programs that do exist while we are talking about the kind of creative changes that you are looking to make in the long term.

Representative SCHEUER. Thank you.

Congressman Williams.

Representative WILLIAMS. No questions.

Representative SCHEUER. Congresswoman Lowey.

Representative LOWEY. Governor, you talked about your counseling program and that you are going to increase that. Sorting through the maze of Federal and State programs in most States is a difficult problem for families and students. How have you dealt with it? Is it in practice now? And how successful have you been?

Governor McKERNAN. We are about to propose to our State legislature the consolidation of the various programs. We have, as do most States, programs that are run in State government as well as some private programs that are run to implement various Federal programs, both grant and loan programs.

The problem is that there isn't a great understanding even with the high school guidance counselors. There are a couple of States—Vermont is one—where they have taken all the programs and put them in a separate agency and they have people they employ on a part-time basis to go to schools to explain programs and what is available. They have seen a significant increase in the percentage of their students who have gone to postsecondary education. That is the program that we intend to implement with some changes in addition to the major program which I talked about, which is a last resort loan program, to say if all else fails don't worry about finding adequate funds; we are going to have the kind of flexible loan program to make sure that we make up the unmet need.

I think that kind of one-stop shopping is really important for young people, especially those that Mr. Brademas talked about, who are of lesser economic means, for whom the whole aspect of trying to figure out how you go and borrow all this kind of money and what it really means and how you combine grants with loans is just more than they want to deal with and therefore oftentimes that turns them off to going on to getting the education that they are going to need.

Representative LOWEY. In times of the budget deficit many of us are looking toward the private sector for a partnership. I wonder to what extent you have the private sector involved in Maine?

Governor MCKERNAN. We have done a number of things. Not as much in postsecondary as we have with the preschool and elementary and secondary. We formed what Congresswoman Snowe referred to as our aspirations compact.

As I said in my testimony, aspirations are a problem in many parts of our State. We have businesses involved with the community and with the local schools to work on increasing aspirations, programs that identify for the schools and the children what is in store for them, what they can do with an education, how they are going to be able to do the kind of things that they want to do and to improve their standard of living with education.

You have probably all heard of L.L. Bean, which is one of our major employers. They have just given $600,000 to our Aspirations Foundation, which is an example of the kind of corporate participation that we are getting.

Representative LOWEY. Thank you.

Representative SCHEUER. Thank you very much, Governor McKernan. We are delighted that you came down and chatted with us.

Governor MCKERNAN. Thank you very much. I apologize for leaving, but I have a plane to catch.

Representative SCHEUER. Jule Sugarman directs the largest and most complex State agency in the State of Washington, with 14,000 employees and management problems ranging from medical assistance for low-income people to the supervision of convicted juvenile offenders.

Maybe if we had had a more adequately funded and well-directed Head Start program over the last 20 years, since the years that you began the program, we would have fewer convicted juvenile offenders to deal with.

It is a source of great personal pleasure and gratification to me that you are here. We worked together 24 years ago when you led us into the Head Start era. We are delighted to have you back.

Please tell us, as you look back in retrospect over the history of the Head Start program, how do you appraise it? Do you think it is worth expanding so that every American child, especially those who need it most, the low-income kids from perhaps culturally and educationally deprived families, have access to it?

STATEMENT OF HON. JULE M. SUGARMAN, SECRETARY, DEPARTMENT OF SOCIAL AND HEALTH SERVICES, STATE OF WASHINGTON

Mr. SUGARMAN. Thank you, Mr. Chairman and members of the subcommittee. I appreciate the opportunity to be here today. With your indulgence, I will file my prepared statement for the record and then simply highlight it.

Representative SCHEUER. Without objection, it is so ordered.

Mr. SUGARMAN. The hearing today creates an interesting juxtaposition between the needs in the higher education field and the needs in the preschool field, the early childhood field, as I would define it.

It is interesting in two ways. One, they may be competitive for what so far you have described as very limited resources. I want to comment later in my testimony on the resources issues.

But also there seems to be an assumption that in future years there will be a need for a great expansion of higher education. I want to say to you, very frankly, that in my judgment we are producing a group of young people who are not going to be ready for higher education, who will not be able to successfully participate in it, and your problem may be exactly the opposite: more colleges available than there are students to fill them.

I say that because of the experiences I have had in the State of Washington since I have been there for the last 2½ years and based on a very broad range of contacts throughout the country, people in the Head Start programs, people in positions similar to mine in State agencies, and contact with the chief State school officers.

Basically, ladies and gentlemen, the children of this country, in my judgment, are in the most desperate condition that thay have ever been in. I don't say that very lightly. As you know, Congressman, I am not a very flappable person.

The desperation that I see in your own State, the State of New York, around children and family issues, the incidence of child abuse and neglect, the incidence of drug and alcohol addiction among parents and among children, the serious delinquency, the unhealthy lifestyles, the gross incidence of misparenting and abandonment of parental responsibilities, failures to thrive in school and the serious deficits in self-esteem and motivation among youth should be truly alarming for this country. There isn't going to be a work force in this coutnry if these trends continue.

Representative SCHEUER. There isn't going to be a work force?

Mr. SUGARMAN. A productive work force in this country if these trends continue. It is simply too late to deal with the issue at the college level if you haven't also dealt with it at the younger age level.

I find a true desperation existing among people who are working with families and children.

I was in New York City recently visiting with some of the welfare agencies in that community, the private welfare agencies. They told me that they can no longer find people to work in their programs because of the conditions of the families with which they are dealing.

The antagonism, the desperation, the lack of concern and motivation, the lack of hope for the future is now endemic among families and their behavior is so dangerous to the workers involved that those public service systems are crumbling. They are crumbling not only in New York, but in Philadelphia, in Detroit, in Chicago, in the District of Columbia, and in almost all of the major urban areas of this country.

So I think the magnitude of the issue and the significance of the issue that you are dealing with here today is much larger than most people realize.

Children born in the last 10 years are different than children we have talked about over the last 20 years. They come in majority numbers from families that are single parent families, from families that are in poverty, from families that have a high incidence of drug and alcohol abuse and all the other debilitating conditions which make it impossible for them to function well.

Ten years ago when I would talk to people in the public school systems about how social and health services relate to what goes on in education, they would say education is education and social and health services are something out there for welfare families.

What I find all through the State of Washington, in our affluent communities as well as our rural communities, is a desperate cry for help now. We have families out there we can't deal with; kids who can't function because the family situation is so dysfunctional that we are just not able to deal with it.

If I had the capacity to do so, I would put social workers from our department and health workers from our department in virtually every school in the State of Washington. I think my experience is not dissimilar from what I hear as to the need elsewhere.

My testimony is a curious blend of optimism and realism. Optimism in the sense of saying we know what to do about younger children; realism in saying that if there are not the resources to do that, we are not going to do what we need to do.

We are on the cusp of really going at early childhood in a serious way. Let me explain to the subcommittee what I mean by early childhood.

I mean those activities—educational, social and health in nature—that cover children from preconception, family planning, and the point of conception through good maternal and child health care, through good assessment, through good preschool programs of all sorts on into, I would say, through the second grade.

Those of you who were on the committee at the time remember our discussions about followthrough and the importance of having a continuity of service.

If I could be king in this country, I would essentially reorganize our educational and other systems to cover that period from birth through age 7 and see that as a continuous spectrum of activities.

The need for these programs to meet the needs of children also intersects with the growth of the child care need in this country—care that is necessary basically because people are working, because families have to work to survive in the society; that is, both members or all of the adult members of the family have to work in order to survive. The problem of how to care for children in that context is very difficult.

I would submit that the day-care or child-care needs and the early childhood needs are not different in nature, that they are all, or should be, developmental, that we should be concentrating and providing an equal quality of care in our child-care programs to what we provide in our early childhood periods.

I have submitted to the subcommittee in my prepared statement some data which indicate that by 1994, if one had the will and the motivation to do so, we could have in place an industry of roughly $100 billion. We now probably have an industry of between $30 and $40 billion consisting of public funding and private funding and parental funding. But the need is to munificently and magnificently increase that amount.

Not all of this is the responsibility of the Federal Government by any means. I think it does take a combination of resources, from State and Federal Governments, and a very significant contribution from individuals.

There are those who believe that private industry will make a significant contribution. I share John Brademas' reservations as to their capacity to do so. If you look at all the child-care programs in the country, some six-tenths of 1 percent of private companies are involved. That may grow incrementally, but not very large.

I recognize the subcomittee has limited time today, so let me just concentrate on this funding issue.

I don't share Governor McKernan's reservations on the capacity of this country to provide what it needs to provide. I believe if you look at our tax situation in this country we have very modest taxes compared to the other industrialized economies of this world. And I believe that there is both a capacity and a will to see significant additional taxes if they are directed toward the needs of children.

Every poll that I have seen in recent times says three things:

No. 1, we believe that children, youth, and families are a critical issue. No. 2, we think that those programs are underfunded and need to be better funded. No. 3, we are willing to support them with our taxes as long as we are assured that the money will go into that kind of activity.

We are testing that in the State of Washington now through an initiative which we will place on the ballot next November—a $720 million tax increase in the State, funded by an additional sales tax, because the need is so apparent out there and people are so committed to it.

A group of us have been working nationally on a similar concept at the Federal Government level which would call for the creation of a children's trust fund, basically to be financed by an additional payroll tax, a minimum, I would say, of three-tenths of a percent, which will produce about $20 billion a year.

That sounds like an enormous sum. I would submit to you, to use the chairman's words of a few minutes ago, this is an investment in America. This is not an expenditure in America. It is an investment that is absolutely essential if we are going to be able to serve the needs of the population now coming into maturity and if we are going to be able to preserve the competitive ability of this country to survive in economic terms.

Thank you.

[The prepared statement of Mr. Sugarman follows:]

PREPARED STATEMENT OF HON. JULE M. SUGARMAN

Mr. Chairman and Members of the Committee

I appreciate the opportunity to testify today. By way of identification I am currently Secretary of Social and Health Services in the State of Washington. In earlier and relevant incarnations I directed the national Head Start program during its first five years, briefly headed the federal Children's Bureau and the Office of Child Development, administered the New York City Human Resources Administration and the National Day Care and Child Development Council. My special expertise is in the translating of program concepts and goals into operating realities. I will concentrate today on those; that is questions of policy, organization, funding, infrastructure and operation.

I plan to focus my testimony today on two separate, but overlapping types of programs: those which we generally call child development and those generally called child care or day care. The need for and values of these programs has been well documented in earlier hearings of this and other committees of the Congress and I do not intend to spend much time on justifying the need. There are however, three fundamental points I want to make,

- Based on my experiences in the State of Washington and knowledge of conditions throughout the nation, our children and families are in greater peril than at anytime in history. The incidence of child abuse and neglect, drug and alcohol use, serious delinquency, unhealthy life styles, gross instances of

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misparenting and abandonment of parental responsibilities, failures to thrive in school and serious deficits in self esteem and motivation among youth is truly alarming.

- Virtually every group in the country, whether it be the Chief State School Officers, the National Association of State Boards of Education, the American Academy of Pediatrics, or the Committee for Economic Development, that has looked at the issue has concluded that the early childhood period is both the period of greatest vulnerability and greatest opportunity for investment in the future of our society and our economy.

  An increased number of people have concluded that the values to be gained are so great that other children with problems may have to be assigned a lower priority in funding of services. I do not agree that the country needs to make that choice, but if it is to be made then I reluctantly would support this emerging view.

- While there is enormous consensus on the need for early childhood programs, we currently have gross inadequacies in goals, organization and infrastructure as well as personnel, physical and financial resources to achieve our objectives. In effect a new child development industry is emerging in America, a mixed public and private industry to which we need to pay careful attention.

The Nature of Early Childhood and Child Care Programs

The term "early childhood" programs means different things to different people. In this presentation it encompasses a wide variety of activities focused on children *and* their families from the pre-conception period through age seven. Because of the multiple forms of families in today's society I use that term to include all those individuals who play a significant role in the nurturing of the child. The upper age level of seven is admittedly somewhat arbitrary, but I use it for two reasons. First it emphasizes the continuity of development from infancy through the toddler, preschool and kindergarten years into the beginnings of the school years. In our existing array of services this age period of services is likely to transcend several public and private delivery systems. Second, age seven is the current upper limit for Medicaid health services for children up to 100% of the poverty level, an income level which is significantly higher than most states use for general Medicaid services.

The types of services I envision as fundamental to a sound early childhood program include family focused services such as education in parenting or nurturing and family support networks which provide continuing peer group and professional help on raising children and family planning. Such family focused programs also need to have linkages with adult service programs such as health care, drug and alcohol control, job training and counseling, anger management and conflict resolution. Put another way the development of children is integrally related to the healthy development of their adult nurturers.

Good prenatal medical and nutritional services are an essential ingredient of early childhood along with a full range of pediatric services. There must be good dental, mental health and other specialized health services such as optometric, audiology and speech therapy activities. A full and effective program of immunizations must be included.

I think it is essential that periodic developmental assessments be conducted, first at birth, then at six to nine months and at least once more in the ages of two and three.

The range of educational/social services needed includes infant care programs (in a child care modality), toddler and preschool programs in both part day and child care modalities, kindergarten, early schooling and Head Start. Also essential are special education activities for children with developmental deficits or the potential for developing such deficits. Therapeutic child care for abused children is very necessary.

All children at these ages need access to the child abuse and neglect networks as well as various child welfare services.

Uniformity of Services

I cannot overemphasize the fact that the needs of children are different from one another. All educational theory acknowledges that children develop at different rates and have widely varying needs as to intensity of services. Yet we persist in designing programs strictly according to age and with astounding uniformity. There are many children who need no services in the early years beyond those provided directly by the family. At the other end of the spectrum a child in a severely dysfunctional family may need total care by persons outside the family. What is needed is a well thought out and continually updated development program for each individual child which is understood, accepted by and utilized by the family and all service providers. That program needs to achieve coordination of activities among all service providers.

All children need services which are designed to further their education, social, physical and emotional development. All programs should be designed with those needs in mind. In my view, it is specious and a disservice to children to classify child care as a custodial rather than a developmental function. For better or worse every moment spent outside the child's home has the potential for positively or negatively affecting the child in major ways. This is not to argue for organised curricula in every type of service. It is to argue that every service provider needs to understand how experiences shape the child and is required to tailor those experiences to the needs of each particular child.

The factors presented above argue strongly that we should favor public support of services for children based on demonstrated need as distinct from uniform service. I am not enthusiastic about public support for uniform preschool programs at ages three, four or younger. I think universal programs tend to waste funds which are more critically needed by other children. I do recognize the value of having children from different backgrounds in a particular service program, but only in moderation. If we someday reach a financial nirvana then we can have universal service availability although I would argue that much of it would be superfluous for many children.

Scope of Need

A critical question for public officials is what is the scope of need for services. Here we see a critical juncture between needs which arise from the child's own developmental needs and the family need for services during employment, education, periods of illness and other family related reasons. Many children need service for both reasons. Many children need more than one service. For example, the child enrolled in kindergarten whose family works will need service during the times when kindergarten is not in session. Similarly the Head Start child needs care in the summer months if Head Start is not operating during that period.

In the tables and charts which follow, I have tried to provide a very rough estimate of the numbers of children needing service for family or child purposes. These estimates are, at best, an informed judgment of service need. They are not empirically based on diagnostic assessments. They probably combine both real need and family preferences which result in the purchase of service even though the need for it is dubious.

The estimates anticipate the expanded participation of women in the work force.

1994 ESTIMATES OF CHILDREN WHO SHOULD RECEIVE SERVICES

ge Group	1994 Population	Percentage In Poverty	Number In Poverty (000's)	Percentage In Single Parent Homes	Number In Single Parent Homes (000's)	Full Day Child Care Program Utilization Rates			Full Day Child Care Numbers of Children (Thousands)			Part Day Child Care		Preschool		Kindergarten	Head Start and Other	Proportions Receiving Service (Non-Duplicated Count)	Numbers of Children (Thousands)					
						Family	Group	Total	Family	Group	Total	Family	Group	Public	Private				School Age Child Care Family	Group	Preschool Public	Private	Kindergarten	Head St and Oth
. Infants (0-1)	7,170	45%	3,200	20%	1,400	40%	10%	50%	2,900	700	3,600	xxx	xxx	xxx	xxx	xxx	xxx	50%	xxx	xxx	xxx	xxx	xxx	x
. Toddlers (2-3)	7,357	40%	2,900	22%	1,600	35%	20%	55%	2,600	1,500	4,100	xxx	xxx	xxx	xxx	xxx	xxx	65%	xxx	xxx	xxx	700	xxx	x
. Preschool																								
(Age 4)	3,731	30%	1,100	24%	900	25%	25%	50%	900	1,000	1,900	20%	10%	10%	10%	xxx	15%	85%	700	400	600	200	xxx	6
(Age 5)	3,756	25%	900	25%	900	10%	10%	20%	900	900	1,000	45%	15%	xxx	xxx	90%	5%	90%	1,700	600	xxx	xxx	3,400	2
. School Age (6-14)	33,228	20%	6,700	30%	10,000	xxx	xxx	xxx	xxx	xxx	xxx	40%	30%	xxx	xxx	xxx	xxx	70%	13,300	10,000	xxx	xxx	xxx	x
TOTALS	55,242	27%	14,800	26.3%	14,000	xxx	xxx	xxx	7,300	4,100	10,600	xxx	xxx	xxx	xxx	xxx	xxx	xxx	15,700	11,000	600	900	3,400	8

NOTE 1: Counts include only children served outside their own home.

NOTE 2: Programs sometimes overlap age groups in minor amounts (e.g., Head Start serves a small number of children under four). Similarly a small number of school programs also serve children under four.

NOTE 3: Some children will receive more than one service: e.g., Head Start and group child care or preschool and family child care.

stimates by Jule Sugarman

TABLE A
NUMBERS OF CHILDREN BY TYPE OF PROGRAM
(In Thousands)

	% Served of Age Group	Full Day Child Care		Part Day Programs					
				Child Care		Preschool			
		Family	Group	Family	Group	Public	Private	Kinder-garten	Head Start and Other
Infants (0-1)	50%	2,900	700	xxx	xxx	xxx	xxx	xxx	xxx
Toddlers (2-3)	65%	2,600	1,500	xxx	xxx	xxx	700	xxx	xxx
Preschool									
(1) Age 4	85%	900	1,000	700	400	600	200	xxx	600
(2) Age 5	90%	900	900	1,700	600	xxx	xxx	3,400	200
School Age									
(6-14)	70%	xxx	xxx	13,300	10,000	xxx	xxx	xxx	xxx
TOTALS	xxx	7,300	4,100	15,700	11,000	600	900	3,400	800

NOTE: Some children receive more than one type of service.

TABLE B

Estimated 1994 Unit Costs By Type of Program

Age	Full Day Child Care		Part Day Programs					
			Child Care		PreSchool			
	Family	Group	Family	Group	Public	Private	Kinder-garten	Head Start and Other
A. Infants (0-1)	$5,000	$6,000	$ xxx	$ xxx	$ xxx	$ xxx	$ xxx	$ xxx
B. Toddlers (2-3)	4,000	4,500	xxx	xxx	xxx	2,400	xxx	xxx
C. Preschool								
(1) Age 4	3,000	4,000	1,800	2,400	2,400	2,200	xxx	3,600
(2) Age 5	3,000	4,000	1,800	2,400	xxx	xxx	2,200	3,600
D. School Age (6-14)	xxx	xxx	1,200	1,600	xxx	xxx	xxx	xxx

NOTE: All programs are assumed to incorporate a developmental philosophy.

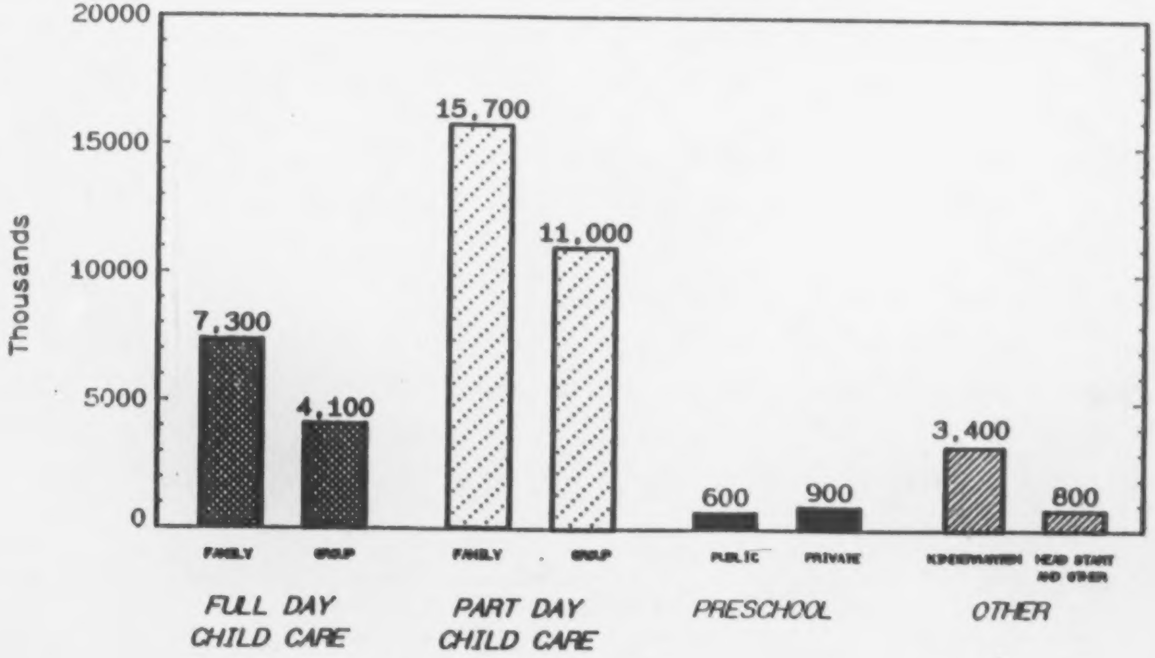
TABLE C
TOTAL COSTS BY TYPE OF PROGRAM
(Dollars in Millions)

Age	Full Day Child Care		Part Day Programs						Total By Age
			Child Care		PreSchool				
	Family	Group	Family	Group	Public	Private	Kinder-garten	Head Start and Other	
A. Infants (0-1)	$14,500	$4,200	$ xxx	$ xxx	$ xxx	$ xxx	$ xxx	$ xxx	$18,700
B. Toddlers (2-3)	10,400	6,750	xxx	xxx	xxx	1,680	xxx	xxx	18,830
C. Preschool									
(1) Age 4	2,700	4,000	1,260	960	1,440	440	xxx	2,160	12,960
(2) Age 5	2,700	3,600	3,060	1,440	xxx	xxx	7,480	720	19,000
D. School Age (6-14)	xxx	xxx	15,960	$16,000	xxx	xxx	xxx	xxx	31,960
TOTALS	$30,300	$18,550	$20,200	$18,400	$1,440	$2,120	$ 7,480	$ 2,880	$101,450

CHART I

1994 Numbers of Children In Early Childhood and Child Care Programs

(Estimates by Jule Sugarman)



Note: Some children require more than one service

CHART II

PROPORTION OF CHILDREN BEING SERVED

By Age Group

Estimates by Jule Sugarman

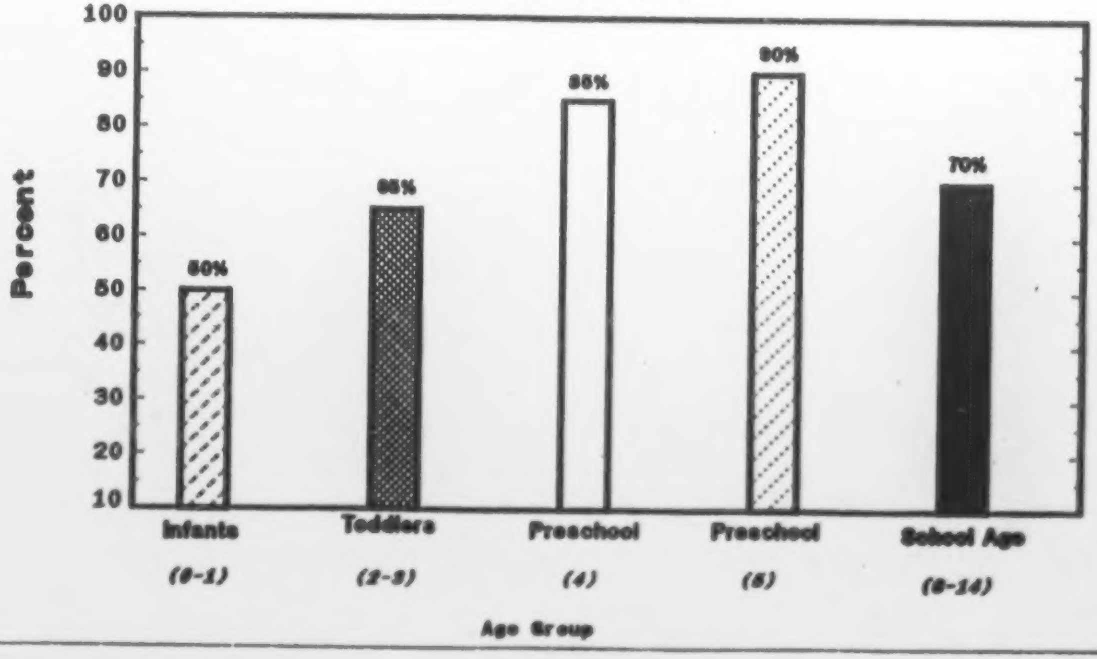
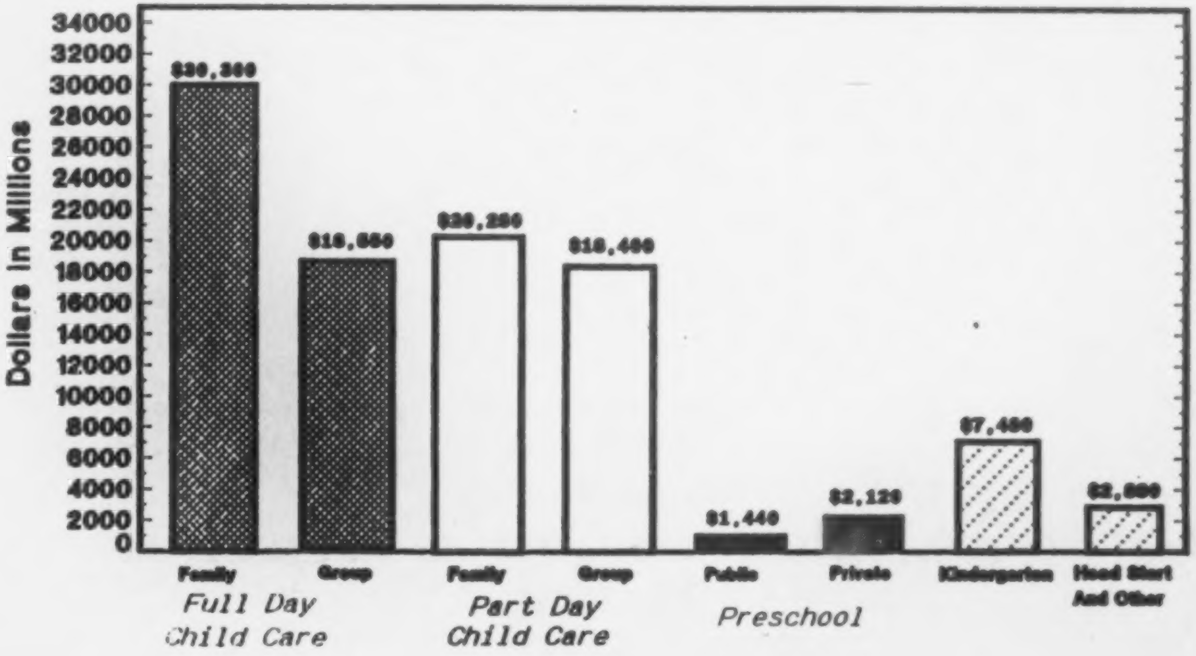


Chart III

1994 Costs of Early Childhood and Child Care

Estimates by Jule Sugarman



It must be understood that these estimates are not estimates of need for publicly supported programs, but rather of aggregate demand. A significant portion of demand is currently being met by church and civic groups as well as the private for profit and not for private sectors through day care centers and nursery schools as well as by private individuals who offer family day care and nursery programs. Data on these providers, particularly those who are unlicensed, is not really available.

I would strongly recommend that Congress undertake a more scientific analysis of aggregate demand as well as an assessment of what should be financially supported by the family and what by federal, state and/or local funds.

The cost estimates aggregate more than $101 billion, by any terms a major industry. Like all industries child development/child care needs physical, personnel, leadership and financial resources, it also needs both individual entrepreneurship and sound business plans if it is to be successful. What follows is an analysis of the essential ingredients to developing that industry.

Leadership

Don Fraser, an enthusiastic supporter of child development programs, a former member of Congress and now Mayor of Minneapolis states the leadership issue in a nutshell — "the problem is that nobody is in charge." We have not, in governmental terms, decided what organization or organizations ought to be responsible for this period of life. By responsible I mean doing the planning, seeing to it that physical plant and personnel resources are available, and arranging for the necessary financing. I do not wish to imply that the responsible organization would necessarily itself deliver any or all of the services. But some public institution needs to have the responsibility for seeing to it that services are available and accessible to those who need them.

The public schools are an obvious candidate for leadership. They have structure, personnel, physical facilities and revenue raising capacity, but they also have limitations. First there is the matter of interest and motivation. Many educational systems feel overburdened already and prefer to concentrate both on current K-12 systems and specifically educational activities. Because of federal mandates most public schools are significantly involved in early childhood programs for special needs children. These activities have provided schools significant experience in working with younger children. There is growing support by educational leaders such as the Chief State School officers for schools to offer programs for four year olds, particularly low income children. Some public schools are involved in school age child care and a smaller number in preschool child care. But school systems as a whole are not yet significantly involved in child care or in child development programs.

An especially difficult problem is the often substantially lower salaries paid to child care providers as compared to public schools. Even for people with similar qualifications, the differences are striking. While no one can defend the salaries paid in day care, the payment of school level wages would substantially escalate the costs of service.

Many child care activities are carried out under the auspices of state or local government social or human service agencies. These agencies often license and in some cases fund early childhood programs. Their authority to license may extend to for profit as well as other organizations.

In addition, many preschool programs (e.g. nursery schools are operated by individuals or private entrepreneurs without government supervision or financing. Finally, we have many health, social and parent services being offered by organizations that have no official or even working relationships with child development programs.

What we have then is a highly decentralized industry with no clear corporate leadership. There are no industry wide standards and inadequate concepts as to what various organizations should offer to the family and child.

There is considerable attractiveness to this highly decentralized industry in that it offers families a wide variety of choices. However, the lack of even minimal standards and the discontinuities among programs argues forcefully for some type of central authority and responsibility.

I suggest to this committee that the assignment of responsibility and authority for child development/child care activities need not be uniform throughout the nation. Individual states and local governments should be permitted to develop the particular type of arrangement they find most useful. What the federal government should be encouraging and assisting financially are a variety of organizational arrangements that:

- Assure that funding for child development/child care activities will be vigorously pursued
- Recommend policies on the degree to which programs should be publicly financed at various family income levels
- Facilitate planning and priority setting, at least in terms of public funding
- Integrate planning for physical facilities with other community planning
- Provide ongoing training and career paths among programs
- Provide essential standards and for licensing and monitoring of programs of all types
- Facilitate working relationships with health, social and family programs
- Facilitates continuity of service in working with the family and/or child

- Provides for accessible information and referral services

- Incorporates data collection and analysis activities adequate to permit continuing planning and evaluation

It may be that rather than selecting a specific operating organization, communities may choose to establish some sort of coordinating organization. I believe that can work provided the coordinating organization has sufficient authority to accomplish the responsibilities described above and a strong role in budgets and priority setting. Other communities may wish to select a new organization or even to create a child development agency. Whatever the organizational form I think it is critical to provide for meaningful involvement of (a) families and (b) private providers whether or not they have public funding.

Infrastructure Considerations

Physical facilities, transportation and qualified staff are major considerations in the development of programs. There is virtually no reliable data available on the need for and availability of these resources.

There is a common assumption that public schools have lots of unused space. I suspect the reality is that the situation varies widely among communities. Some communities have school space, but in the wrong locations or in buildings which are poorly configured for child development purposes. The availability of space can really only be determined on a community by community basis and ought to be part of the community planning process. There is very likely to be a demand for financial assistance for both public and private organizations for facility construction and renovation.

Transportation issues are more complicated than most school transportation issues because (a) younger children are involved; (b) transportation between different programs (e.g.) kindergarten and child care) may be required; (c) services (especially family day care) will be offered in a much larger number of locations; and (d) transportation may have to be to the door of specific homes and apartments rather than to collection points.

With respect to staffing, there are major unsettled issues with respect to levels of staffing and basic qualifications required. In general it is highly unlikely that sufficient personnel are available for major expansions in services. Therefore extensive training will have to be provided.

The Federal Role

The scope of the industry to be developed, some $101 billion by 1994, is enormous. There are significant elements of funding already in place. Kindergartens are largely financed through local or state funding. Federal and state funds subsidized Head Start as well as day care in a magnitude of roughly $7-10 billion. Families pay most of the costs of nursery school and significant portions of part and full day care services. A handful of employers contribute to the costs of day care.

As a ball park figure, I would estimate that expansion to the indicated 1994 levels will require $40-60 billion of public funding. These costs would have to be shared among federal, state and local governments. However, I believe there are tremendous variations in the ability of states and local communities to finance such service. I estimate that 45% of infants, 40% of toddlers, 30% of four year olds, 25% of five year olds and 20% of school age children are in families with incomes below the poverty level. Similarly, an average of 26% of children under fifteen are estimated to be in single parent homes. Both types of families have very limited capacities to pay the full costs of child care services.

There are significant differences in the proportions of children under five to total population in each state. Utah is highest with 11.8%. States in the 8-9 percent range include Alaska, Idaho, Louisiana, Mississippi, New Mexico and Wyoming. In contrast, the District of Columbia, Connecticut, Florida, Hawaii, Massachusetts, Pennsylvania and Rhode Island have 6.5% or less.

By another measure, children under three in poverty (1980 data) varied from 8 percent in Wyoming to 31 percent in Mississippi.

In still another indicator personal per capita income (1986) levels varied from highs of $19,600 in Connecticut, $18,626 in New Jersey and $19,397 in D.C. to lows of $9,716 in Mississippi, $10,576 in West Virginia and $10,891 in Vermont.

The thrust of all this data demonstrates very substantial differences in the ability of states to finance early childhood programs.

The parallel question is what is the capacity of the federal government to finance additional services for children. As a point of reference, Federal expenditures for services to children,youth and families will total about $33 million in 1989 or approximately three tenths of a percent (.3%) of the federal budget. If the federal government were to assume half of the costs of developing the new services we would be looking at a need for roughly $25 billion each year. In the context of the interest in reducing the federal deficit, I see no way to finance this level of critically needed services without additional revenues.

I have been discussing with many leaders in the children's field a proposal to create an earmarked Children's Trust to finance child care and other essential services for children, youth and families. Funding would come from a .3% payroll contribution from both employers and employees, as well as a higher rate of contribution on wages and earnings above the 1988 "cap" of $45,300. This approach, depending on the rate of contributions above the "cap", could generate between $26 and $40 billion per year, thereby eliminating any concern about increasing the deficit. I have attached a copy of my proposal to the testimony.

Conclusion

The importance of early childhood/child care programs is universally accepted and a new public/private industry is emerging to meet the need. Services ought to meet the needs of families and children from conception through age 7. The services should be comprehensive, but customized to the needs of each family and children. We should avoid universal public services for children who do not need them.

A full program in 1994 would cost approximately $100 billion. Some $40-60 billion of public funding is needed by 1994 to finance these programs. If the federal government were to accept half the responsibility for new public funding, additional revenues of $25 billion would be needed. A Children's Trust as proposed by me could provide much of that financing.

Major decisions must be made on state and local structures for developing early childhood and child care services. There needs to be "someone in charge." That organization needs to have enumerated powers which make possible an integrated industry.

Representative SCHEUER. Thank you very much, Jule.

I agree with your observations about our elementary and secondary school system. In New York the picture that you painted would be an understatement. It is a school system in terrible crisis. This crisis was the subject of our first 9 days of hearings. I will make sure that you get that report.

We appreciate your testimony very much.

Now we will hear from Admiral James Watkins, former Chief of Naval Operations and former Chairman of the President's Commission on AIDS.

Admiral Watkins testified absolutely brilliantly before our subcommittee about a year ago. He is such a unique public leader and has fulfilled such a marvelous public role that we invited him back to testify on the question of expanding America's education system.

Admiral, it is very comforting to us that a man of your superlative quality can rise to the top in the ranks of our military.

Please take such time as you may need and tell us your reaction to the statement of President Truman's commission that the time has come to make education through the 14th or the 16th grade available in the same way that high school education is now available, and likewise, to make Head Start available for every American kid, especially the 80 percent of the kids who need it the most who are not getting it at the present time.

STATEMENT OF ADM. JAMES WATKINS (RETIRED), U.S. NAVY, AND FORMER CHAIRMAN, PRESIDENT'S COMMISSION ON AIDS

Admiral WATKINS. Thank you very much, Mr. Chairman, particularly for asking me back this year. I think your report released today on the education deficit is right on the mark.

You focused in that report on early childhood education program needs. I am going to talk a little bit more about the health aspect because we saw the vital importance of this issue in very clear and clarion terms during our AIDS investigation.

You have clearly grasped the breadth and the depth of the literacy issue across the Nation. I think you will recall that during our prehearing discussions last year there were some who would indicate that perhaps there is a relatively cheap and quick fix that we could put in for adult literacy and this sort of thing. I think your report clearly surrounds the issue in a much broader way, that this is a much larger issue than can be solved in a quick-fix fashion.

So today I would suggest that perhaps I will come in from a different vantage point and focus on two additional elements and then I will answer your question about the Truman belief in the educational concept of the future of the Nation.

The health of the Nation and its application to a competitive work force and the motivation of the youngsters as new entrants into the work force become very critical elements, the glue, if you will, that will bind your education deficit report together and bring it to fruition.

Without the good health of the youngsters and without a motivation and extraction from the hopelessness so many find themselves in, we are not going to realize your good literary objectives—I agree 100 percent with Jule Sugarman on this. I thought his testimony hit the mark right on the head and was in total synchronization with what we heard from 600 witnesses during 43 hearings on the AIDS Commission—all extremely concerned about the health and welfare of our young people, particularly those that we call at risk, the disadvantaged, or the underclass.

As a matter of fact, before the commission, we asked the National Urban Institute to present a research paper which I felt was compelling on this very issue. They defined the underclass in research terms: school dropout rate, single-parent family mother, the poverty situation, and lack of access to health care and other similar indexes, and drew the boundaries of that definition around Newark, New York, Chicago, Miami, Los Angeles, and the like.

Then they overlaid the AIDS epidemic as another tragic symptom of our time and the overlay was direct. I think you may have seen some of those curves. They are extremely impressive.

This immediately gave the commission the clue that we were dealing with a much broader issue than condoms and clean needles. We are dealing with the very issue that Jule Sugarman is talking about; we are dealing with the very issue that you are talking about in your report on the education deficit. So there are many complex elements in the equation surrounding the human capital ills of the Nation.

First I would like to talk about the added dimension of health to your education deficit report.

We reported to the President, among other things, that he had given us a unique opportunity to look at the Nation by investigating the medical, ethical, legal, social, financial, and international ramifications of this epidemic. This was an unusual opportunity to look at our Nation through what I have called the lens of the HIV, or the virus.

In addition to the frightening specter of drug abuse, the overly burdening and unnecessary cost to the health care delivery system and so forth, we talked about the absence of integrated health education and health promotion programs in our schools. The best public health officials in the Nation came before us and gave our school system today a grade of D minus in health education and health promotion consciousness that could give children any hope over a lifetime of developing a commitment to their own good health and perhaps an understanding of the good health needs of their neighbors as well.

So I would like to discuss that element of literacy in the context of our AIDS Commission work.

We made some recommendations in our report to the President which, of course, dealt with the short-term response, the AIDS-specific education.

But what we were concerned about in focusing solely on the short-term specifics was the probability that we would again mislead the American people that we were going to solve this problem by another Band-Aid on a symptom. After all, we had been through the smoking, alcohol, drug abuse, safety-related accident, teen pregnancy, teen suicide, teen crime, nutrition, and other specific programs.

We felt very clearly that it was time to stop taking this fractionated approach to health and institute a much more fundamental health education process, preschool through postsecondary.

We made recommendations in that regard and we asked the President to direct the Secretary of Health and Human Services and the Secretary of Education to cochair a task force on comprehensive school-based health programs. This is not a new idea. The Congress has pushed for sometime to bring these two Cabinet heads closer together. It has not taken place yet.

The task force should articulate concepts which will drive development of a truly comprehensive health education program at the local level. The strategy of the funding should be addressed at that time, and I will talk about that in a minute.

Until we allow the tremendous base of American youth, including the one-fourth that now drop out of school, to have a chance to understand about their own human behavior and biology, I don't see how we can expect them to be part of the solution. They must be part of the solution. These are bright kids. Persons with AIDS today know more about their immune systems than the average doctor I have talked to.

That tells me that, in the age of computers, these youngsters are smart enough to know what happens in their systems from smoking and drug use and so forth and what they are doing to their lifestyles or lives with early unwanted teen pregnancies. The latter, alone, now costs the Nation about $12 to $16 billion annually. There are some dollar offsets, then, if we could get 70 percent of those kids back into the mainstream—our experience in the Navy.

There are opportunities here that are unusual. I had hoped that this AIDS Commission would have provided the catalyst, because of the shock that the Nation feels about AIDS. I had hoped it would be the Pearl Harbor to inspire us to the broader approach to the education excellence that your subcommittee is committed to.

I would like to ask that the particular short section, section III of the education section of our report, be made a part of the official record.

Representative Scheuer. There being no objection, it is so ordered.

[The information follows:]

provide services to homeless and runaway youth. The funds should be used to initiate and/or expand programs designed to provide appropriate education strategies for runaway and homeless youth. When federal money is involved, HHS and HUD should require that all recipients provide detailed evidence of ongoing coordination with state and local departments of health and other social service agencies. Funding should be based on an established history of positive interventions with homeless and runaway youth and innovative program design.

7-28 The Centers for Disease Control should make funds available to organizations representing persons with disabilities and special education professionals to develop materials and disseminate information about HIV infection. Such materials should be targeted to the unique needs of individuals with mental retardation, mental illness, hearing impairments, visual impairments and other learning and physical impairments.

7-29 The Centers for Disease Control should make evaluation grants to state departments of health to conduct special studies to determine what programmatic interventions are most effective in reducing transmission of the virus in various communities. Detailed information about those programs, including program content and implementation strategies, should be provided to other state and local departments of health, as well as national and community-based AIDS service organizations, so that those programs can be replicated in other parts of the nation.

Section III. School-Based Education

The Near-Term Response: Immediate HIV Education

A two-part response to the epidemic is required from the nation's elementary and secondary school system. The first part must happen in the short term. It is the opinion of the Commission that the provision of HIV education in our schools is of vital importance and must be introduced across the nation immediately. Some states have already ensured that this is happening; the rest must follow their lead. The decisions about appropriate content and methods of instruction should be determined at the local level; however, both elementary and secondary school students should receive such education. Students must be provided with current and accurate information about the HIV epidemic that is appropriate for age so that they can make informed decisions about their behavior and avoid those actions that put them at risk for HIV infection. School-based education should highlight the benefits of character development, abstinence, and monogamy. By ensuring that appropriate education about the virus is provided in the elementary and secondary school system, we can help our younger generation avoid the tragedy we are witnessing today.

The second part is the long-term response, which will have a far greater pay-off when fully implemented; that is the introduction of a comprehensive health education curriculum for all grades K through 12. This broader topic is discussed later in this chapter.

Obstacles to Progress

- The HIV epidemic involves some of our most personal behaviors, and many find it difficult to incorporate information about the epidemic and those behaviors into a classroom program.
- Many communities still do not believe that the HIV epidemic is something that will ever affect them and, therefore, see no need to provide HIV-related education to their children.
- Funding that will allow HIV education programs to be delivered is not in place.

RECOMMENDATIONS

7-30 State boards of education should mandate that an HIV education curriculum with appropriate content for age be offered to all students at each schooling level (e.g., elementary, middle, and high school) throughout the state.

7-31 If such a system is not already in place, the state director of health and the chief state school officer in every state should establish a formal mechanism to exchange information about the HIV epidemic, including current technical information and model education programs.

7-32 School staff who deliver HIV education should receive extensive in-service education before they begin instruction. The content of the in-service education should be designed in conjunction with state education and health agencies. No member of the school staff should be forced to deliver education about HIV if he or she is not comfortable with the subject.

7-33 Local school boards should establish an advisory committee, consisting of school board members, professionals from the state and/or local public health department, parents, teachers and students, to develop an HIV education curriculum. The committee should meet at frequent intervals until the curriculum is enacted and thereafter at least annually to monitor and evaluate HIV school-based education.

7-34 The Department of Education, the Centers for Disease Control, states and localities should increase funds to national education organizations, school districts, and other educational entities to design and implement HIV education curricula.

7-35 The Centers for Disease Control should increase funds to colleges and universities for creation and/or expansion of HIV prevention and education programs on campus. The schools should use these funds to educate their students about the medical aspects, including appropriate risk-reduction techniques, and the societal aspects of the epidemic.

7-36 State and local health departments should conduct conferences to provide current technical information about the HIV epidemic to state and local school boards, principals, and teachers. Such conferences should be held regularly, based on the amount of new information available or requests for updated information.

7-37 State and local health departments, in conjunction with state and local school boards, should conduct conferences to provide current and accurate information about the HIV epidemic and school-based education initiatives, including the description of model programs, for parents of school-age children. Such conferences should be made available free of charge to all parents of school-age children, and should be held regularly, based on the amount of new information available, turnover in the student population, or requests for updated information.

The Long-Term Response: Comprehensive Health Education

The Commission strongly believes that the introduction of an age-appropriate comprehensive health education curriculum that encompasses grades K through 12 is long overdue. Providing our nation's school children with education about HIV transmission, as recommended in the near-term response section, is a significant step. However, it represents only a stop-gap measure to correct a larger problem. The expert witnesses who testified before the Commission clearly demonstrated that the problems that are afflicting youth today -- such as sexually transmitted diseases including HIV infection, drug abuse, school-aged pregnancy, and decisions to drop-out or run away -- are all inseparably intertwined. The HIV epidemic provides a unique impetus to address these problems in total rather than continue the piecemeal, fractured, and largely ineffective approach that is being undertaken today.

The heaviest burden of illness in the technically advanced countries today is related to individual behavior, especially the long-term patterns of behavior often referred to as "life-style." In the United States, it is reliably estimated that 50 percent of mortality from the 10 leading causes of death can be traced to life-style -- health-damaging behaviors such as smoking, drinking, eating too many calories and too much fat, and inactivity. Other behaviors highly relevant to health and disease -- both mental and physical -- are responses to the stresses of events in life.

What we do early in life lays the foundation for all the rest. The early years can provide the basis for a long, healthy life span. Early preventive intervention tends to be exceptionally cost-effective. Health and education are closely linked in the development of vigorous, skillful, adaptable young people. Investments in health and education can be guided by research in biomedical and behavioral sciences in ways likely to prevent much of the damage now being done to children and adolescents.

The onset of adolescence is a critical period of biological and psychological change for the individual. Puberty is one of the most far-reaching biological upheavals in the life-span. For many, it involves drastic changes in the social environment as well: the transition from elementary to secondary school. These years (ages 10 to 15) are highly formative for health-relevant behavior patterns such as the smoking of cigarettes or avoidance, the use of alcohol or other drugs or abstaining, the driving of automobiles and motorcycles, habits of food intake and exercise, and patterns of human relationships, including pre-marital sexual activity leading to high-risk pregnancy and sexually transmitted disease or abstinence. Before health-damaging patterns are firmly established, there is a crucial opportunity for preventive intervention and affirmation of healthful living and self-respect.

Despite the drastic biological, social, and technological changes surrounding adolescence that have taken place during this century, there appear to be fundamental human needs that are enduring and crucial to survival and healthy development:

- The need to find a place in a group that provides a sense of belonging.
- The need to identify tasks that are generally recognized in the group as having adaptive value and that thereby earn respect when skill is acquired for coping with the task.
- The need to feel a sense of worth as a person.
- The need for reliable and predictable relationships with other people, especially a few relatively close relationships.

The experience of industrialized nations suggests that rapid social changes, the breakdown of family supports, and prolongation of adolescence are associated with an increase in behavior-related problems such as substance abuse, school-age pregnancy, and education failure. The opportunities for prevention rest heavily on finding constructive ways to meet the basic aspirations of adolescent development in a new social context.

The Commission believes that comprehensive health education, taught through a life sciences curriculum, offer a distinct opportunity to stimulate early interest in science and to learn how to deal more effectively with matters of deep human concern. The life sciences, by stimulating children's interest in understanding nature, can also lead the way to a deeper study of other scientific disciplines such as chemistry and physics.

In this context, then, health education includes at least three components in a system: (1) education in terms of classroom instruction and curriculum; (2) school policies that support the knowledge and skills that are developed through such education; and (3) governmental policies and regulations that reinforce both of the above. But it is the school health program that is "comprehensive" in taking into account different levels of a total system from the individual, organization, community and government, and *not* the curriculum that is so often referred to as "comprehensive". A truly "comprehensive" health education program is one that integrates basic concepts in biological and behavioral sciences, and opportunities to apply problem-solving and decision-making skills in the context of real-life individual and social issues.

An important goal in understanding human biology will be to permit better solutions -- with less strife and more informed public participation -- to biological aspects of social problems, such as environmental hazards. Knowledge of human biology is particularly important for decisions that relate to health -- decisions on whether to use alcohol, cigarettes, or drugs; to understand what constitutes healthy diet and exercise; decisions about sexuality -- as well as decisions on when and how to seek health care. Thus, education for health is a potentially powerful offshoot of education in the life sciences.

The objectives of teaching life sciences to all students is to provide a major stimulus to the biology curriculum for young adolescents. An age-appropriate comprehensive health education program (K through 12) would teach students essential concepts in biology and then relate these concepts to problems that students encounter in their daily lives. These programs should emphasize personal responsibility for one's actions. Actions have consequences. It would promote healthy behaviors, through the knowledge they will gain about themselves -- and what they can do to their own bodies and their own lives.

The Commission believes it is time to allow our children to become part of the solution to all health threats they face, and to do this by engendering in them a fundamental knowledge of their own biological uniqueness as part of a comprehensive health education program. A life sciences/health education curriculum must be reinforced by consistent school climate and policies, family and community support, constructive messages from the media, and favorable governmental policies -- a far better alternative than continuing the counterproductive practice of allowing society to consistently criticize youth as being the problem itself.

RECOMMENDATIONS

7-38 The President should direct the Secretary of Health and Human Services and the Secretary of Education to co-chair a task force on comprehensive school-based health programs. The task force should articulate concepts which will drive development of a truly comprehensive health education program at the local level. Strategies for funding should also be produced. Additionally, the task force should explore the development of incentives for school systems to incorporate these concepts into their programs. The Elementary and Secondary Education Act Amendments of 1988 (the Hawkins-Stafford bill), which provides funds for school systems to develop coordinated health and physical education programs, is an example of such an incentive.

7-39 **All schools, both public and private, should have comprehensive health education programs for grades K through 12 fully implemented by the year 2000.**

7-40 **School boards and parents should develop means to incorporate values emphasizing personal responsibility in the general education curriculum.**

Admiral WATKINS. I will cut my comments short here.

I had an interview with Frank Newman who comes before your committee periodically as president of the Education Commission of the States, the right arm for education of the National Governors' Association. This interview was published in the September-October 1988 issue of Change and was entitled "Students 1988, Voluntarism, Values, Jobs, and AIDS."

In that interview I discussed in some depth the need for postsecondary education to be in the middle of health education and youth community service, particularly as they relate to helping our underclass—mentoring, tutoring, and so forth.

Those kinds of incentives for postsecondary educated youngsters to me would be the immediate focus of our interest—to get kids involved in community, get them inspired to be a part of important community efforts. Much as some of the universities have already inculcated into their students: "OK, Mr. MBA student, we applaud your desire to be a city manager. We want A students to be in there. We don't need another Ivan Boesky on Wall Street. We will give you an incentive to meet your desires." So, let's get the best and the brightest into the jobs where A students are teaching or joining city governments or involving themselves in the kind of social work that is so essential to bring one-third of our kids out of poverty and hopelessness and give them a chance in life. All our young people are desperately needed in the work force today, as you know.

I am now talking about the second added dimension of literacy, one which I call motivation. I think the motivation of these youngsters is so critical. Otherwise there is no sense of relevance to the education process. We just heard Jule Sugarman talk about that. So we have to find an institutional mechanism. Yes, Eugene Lang's experiment was a wonderful experiment. It is the kind of concept we would like to see implemented nationally. But, whether you can extrapolate that concept across the Nation to be the sole mechanism is another question. On the other hand, it is one proven motivational regime.

But let me talk about another one. While we have five bills on Capitol Hill now on national service, I would rather see the focus on youth community service at this point in time so as to prepare youngsters to aspire to participate in public-private community service projects—say, with the elderly, with the young, so as to help this Nation out through their commitments for life to meet societal needs.

It seems to me we can inculcate such a commitment into our youngsters in a concept that goes from K to 12, providing core curriculum underpinning of second language, of civics, of ethics, of a study of the cultures that make up our society, and so forth. An early emphasis on academic and practical community service underpinnings can enhance the desire on the part of youngsters to participate in our society.

That to me would build the self-esteem, the self-motivation, the human dignity we need to instill in our people if we are going to help Mr. Bush achieve his "kinder and gentler" society which I happen to agree is a wonderful objective. And here are some ways to do it.

I am on the Carnegie Council for Adolescent Development. We are developing a middle school model for ages 10 to 15, nominally school years 5 through 8. This is a neglected area, but a very important area, to prepare these youngsters for the incredible changes both physiological and social that take place as they walk into these incredibly complex inner-city schools.

Also there is a program called Campus Compact. As you know, this now involves over 100 colleges. Mr. Newman can talk about this later. It is a very important one, where youth community service is part of the educational requirements for a baccalaureate degree. This means that we are getting the colleges involved in our youngsters, and that is critical. To establish role models, to provide the continuum of community service concepts from down to preschool on up, certainly in the area of health, are so critical.

The Elementary and Secondary Education Act that Congress passed last year is an excellent act. One of the six targeted programs nationally, under its title II provisions, is called personal excellence. That program includes health education, health promotion, fitness of youngsters, youth community service, as well as all of the other educational reforms in teaching and schooling that are necessary.

Those incentives are in law now. If we can just expand on them, and encourage demonstration projects at larger levels, and begin to prove that such a holistic approach can bring the work to fruition, then we will achieve the kind of work force this country desperately needs now and certainly by the year 2000.

It's an integrated concept. These recommendations are contained in both this magazine exchange that I had with Mr. Newman as well as in our report, and I would like to also ask that that particular article be in the record.

Representative SCHEUER. Without objection, it is so ordered.

[The article follows:]

AIDS, YOUTH, AND THE UNIVERSITY

AN INTERVIEW WITH ADMIRAL WATKINS

After months of intensive hearings and interviews, President Reagan's commission on AIDS submitted a final report to the White House last June calling for a $20-billion effort over the next decade to combat the deadly disease. Included in its call for sweeping changes in the nation's health-care system, the commission report strongly emphasized the role of education in helping prevent the further spread of AIDS. Admiral James D. Watkins, the chairman of the AIDS Commission, is interviewed here by Frank Newman, president of the Education Commission of the States and Change *contributing editor, about the impact of HIV on the campus and the university's role in helping contain the epidemic. Watkins, who took over the 13-member advisory panel last October, is a retired four-star admiral and member of the Joint Chiefs of Staff, and served as Chief of Naval Operations from 1982–1986.*

NEWMAN: Jim, you've just devoted nine months of your life to an intensive look at the AIDS situation. What's the most important thing you learned?

WATKINS: I think the lesson that has come home to me throughout these months is the fact that education is the principal weapon we have for dealing with the virus. After all, we have no cure and no vaccine at this point.

When I speak of "education," though, I speak of a term misunderstood by many people who, too quickly, focus solely on the schoolroom environment—say, in the high schools. But our look at education should be much broader. For example, what we are seeing is a poorly educated health-care community—doctors, nurses, dentists, who simply don't know much about the virus. Or, we see religious leaders engaged in bigotry about this epidemic because they lack education about the virus. So we need a more comprehensive, far-reaching approach to educa-

Admiral Watkins, shown here talking to staff members Thomas Branat and Gloria Smith, urges educators to help tackle the AIDS threat by helping students gain a fundamental understanding of human biology. (Photo by George Tames/NYT Pictures)

tion. We mean education for the workplace, for those not in the workplace, for those in the schools, for that quarter of our kids who should be in the high schools, but are not. We are talking about health-care provider education, and about educating volunteers, community-based organizations, and public health officials that have to be involved with this epidemic. So we are talking about every single aspect of education in order to reach all segments of society, particularly those segments out of the mainstream who are at highest risk.

NEWMAN: Where do you find the locus for that? Who's got to take the leadership?

WATKINS: I think the federal government, state governments, and all the people who work in health fields have to come together and develop new concepts of educating for broad, fundamental understanding of our own human biology, so that youngsters themselves can begin to participate and be part of the solution to the many health-related ills that society faces.

For example, we know about low birth weight and teen pregnancy and what it does to slow down cognitive processes in the early school grades. We know we are dealing with things like nutritional problems; inadequate participation in Head Start; the teen pregnancy issue; and substance abuse, whether it's alcohol, smoking, or drugs. So we are looking at an opportunity here to completely restructure the way we focus our efforts to understand what a healthy lifestyle is all about. Too often we *assume* that a child in this nation will be healthy. That may have been true years ago, but society is markedly changing. For example, one-third of youngsters today are born into poverty: now we are hardening an underclass with inadequate health-care availability, and our studies show a strong linkage or overlay between that underclass and AIDS. The overlays are direct and frightening to me. With the rapidly changing demographics, this underclass will consist mainly of Hispanic and black Americans.

What emerges is a much larger specter hanging over the nation than just this virus alone. AIDS brings into focus a variety of flaws in our system—flaws well known to professionals in education, business, and health—major flaws in the ways we approach youth at risk and adolescent development generally. All those flaws are brought into sharp focus for the American people by our look at society through the HIV lens. The job of educators of all kinds, then, is to help people learn in a fundamental way about human biology and their own bodies so they can possess lifelong strategies for healthy, wholesome lifestyles, not only for their personal good and human dignity, but with respect to others.

NEWMAN: So when you say "education," you mean more than simply knowing about what causes AIDS. You are talking about trying to get at health-care problems by getting students to understand the nature of human biology.

WATKINS: Absolutely. That larger understanding is far more important than HIV-specific issues. I know we have to do things in the near term because there is so much misunderstanding out there, but we have to start talking now about how young people can become real players in solving the health threats that face them across the board.

You know, if youngsters learned from kindergarten through the sixth grade, for example, how to approach the complex transitional period to puberty, about the physiological changes in themselves as they move into new, more worldly environments, then AIDS instruction would have a chance. It would build on an educational base, so that when we talk to our young people about AIDS they'd understand from what they learned earlier about human biology. We would engage them at a point when they could begin to make their own decisions—sound decisions based on solid knowledge of their own bodies. And somehow, if we don't take advantage of the concern created by the HIV threat, we'll miss a great opportunity to expand our approach to education at a time when the nation desperately needs young people aware of their own uniqueness and human dignity, key underpinnings of solidifying self-esteem.

NEWMAN: So you are arguing that we have a bad threat, which we must use as an opportunity because, as bad as this threat is, it is not the only thing we have to worry about.

WATKINS: Exactly, and because we can't deal effectively with AIDS in isolation. Throughout our examination of this epidemic, we saw a society ill-prepared from an educational point of view; ill-prepared from a health-care delivery point of view; ill-prepared from a therapeutic-drug development point of view. It is ill-prepared on another front: to eliminate the incredible specter hanging over us of drug or substance abuse. It is ill-prepared because our society still has too little compassion for the handicapped and still condemns and rejects and discriminates against the handicapped, a community which now includes people with AIDS. I thought we had matured beyond those attitudes towards our fellow man, but we haven't.

NEWMAN: In your AIDS Commission work, did you find yourself surprised by the degree of discrimination still present in society?

WATKINS: I was surprised by it. What tugged at my heartstrings most were people who were infected with the HIV who had absolutely no knowledge of it coming to them. There is no way to talk about "behavioral change" for them. Let's talk about the hemophiliac, or the transfused person in the hospital; let's talk about the infant with AIDS—there will be 10,000 to 20,000 of them by 1991—with virtually no parents to care for them. We can pontificate all we want about "family lifestyles" or one thing or another, but these youngsters have no families. Or the case of wives, married 37 years to men whom they only recently found were bisexual and had transmitted the virus to them. I found a tremendous need to be sensitive to these individuals. People also tend to think of homosexuals or bisexual males as communities that can be isolated so as not to touch the rest of us. But, in fact, what we have out there is a very worrisome potential among adult bisexual males; for example, for heterosexual spread of the virus to individuals who would have no knowledge that they would be infected. I think that fact grabbed me more than anything else. This epidemic can touch all of us.

Let me say it again: AIDS is not confined to special groups. We have got to get beyond condemnation of lifestyle as the answer, or we are not going to get on with dealing with the virus, or for that matter any of the related issues with which we have to deal. I think we have an opportunity here to go beyond the HIV and do something long-range that was desperately needed long before this epidemic arrived; and education is a big part of the answer.

NEWMAN: Let me just play through your argument for a moment. You've focused on several problems. One is understanding the disease itself, and the nature of how one gets it. A second is understanding our own bodies and human biology. And third, you've argued, we need to understand the nature of the health-care problem facing us, and health-care professionals need to understand much more, too. Then, fourth, you've said that we must address the questions of social behavior and discrimination that all this exposes. Aren't colleges and universities somehow forced to be in the center of all of this? Aren't they the normal educators in many of these things?

WATKINS: I think they have to be the focal point of an educational fix for dealing with this epidemic, and any future epidemic. If they would pick up this banner in the medical and all other colleges so that university graduates became involved and interested in a healthy, wholesome life for themselves and enjoyed fitness and self-understanding, they'd carry that knowledge into the workplace and feed it back into the schools. They'd become a catalyst for moving the nation in the right direction. I think a lasting movement of this kind almost has to start at the college level. It has to start everywhere, of course, but colleges can provide the inspiration and should be capable of moving on this right away.

NEWMAN: Have you seen much response from the universities at this point?

WATKINS: No, I haven't really. But then I would have to say we didn't lean on those from academia who came to us on this issue, except to ask, "What grade would you give? Madam or Mister Public Health Official, what grade would you give the nation on its understanding of the importance of health education, health promotion, and fitness in our whole schooling process, from pre-school up to the baccalaureate level?" Answer: D minus. So this told me that we have a serious problem.

In the Carnegie Council on Adolescent Development we are focusing now on building a middle school model where health education, health promotion, and motivation of youngsters (through youth community service) becomes an integral part of their educational development. We hope to show how youngsters who are now at high risk can be motivated to be part of the solution to these problems: to become peer mentors, to help each other pull themselves up in their understanding about how to avoid things that threaten good, wholesome lives.

NEWMAN: You keep coming back to a viewpoint, or fact, that it's not as simple as teaching someone how AIDS is transmitted, that we have to teach what it is that makes a healthy, whole person.

WATKINS: I think that it's essential because focusing on AIDS alone raises so many questions in the mind of a youngster. So what are you telling him? From a youngster's point of view, how do I remember this? How do I place it in context? What is the meaning of that piece of information? For a teacher or a student, it's very difficult to take one, isolated health threat and just deal with it alone.

I recognize that in the immediate present we have to deal with certain age groups and provide certain information at the high school or junior high school level, and perhaps even down into the lower grades. But that gets to be pretty dicey. And it will always be colored by the circumstances and value system of the community, so that the AIDS curriculum designed for New York City won't be necessarily the same as that for a small town in the Midwest. Even so, the question is then: Isn't there a way to pull together much more as a nation and build a common curriculum of good health across the nation? Can't we deal with these things in such a fundamental way that when the next virus comes along we are ready to move quickly and knowledgeably as a people? Must we again go through this incredible period of social unrest that we've witnessed with AIDS, where myths and misunderstanding and vitriolic comment and condemnation have been the norm? There must be better ways for civilized societies like ours to deal with something like this.

NEWMAN: That is an interesting point. You are saying we may not have seen the end of this, that even if we are able to attack this virus we may find a mutant that comes along and deepens the problem. You are saying that we have got to have a societal capability. Am I reading you right on that one?

WATKINS: Absolutely, a societal capability to deal with fast-moving sets of unknowns . . . after all, we have never discovered a vaccine for a retrovirus, so this is new, and all of the projections coming out of the World Health Organization or from the Institute of Medicine give a rather somber picture of what is ahead for us in cures and vaccines. The HIV is something that is going to be with us for a long time. We have to be careful that we don't build a Maginot line around this virus only to wake up one morning and find a new virus upon us, like an airborne mutant, which would be quite different in how it manifests itself. These are the kinds of things that a nation like ours, a leader in the world and in world health, should confront and learn as lessons. We should package up these lessons learned in the AIDS crisis and factor them back into our education and public health crisis systems so that we don't lose opportunities that are here now to build a better society for the future. We should see in AIDS a "Pearl Harbor" to wake us up and mobilize broadly to commence a war on this virus.

NEWMAN: Jim, you've mentioned the importance of getting young people to understand the nature of their own bodies, what a healthy human being is, and so on. One of the things that has been commented on a good deal is that many at-risk youngsters lack the belief in their own future to care enough about questions of their own health, teenage pregnancy, AIDS, drug use, and so on.

WATKINS: Absolutely.

NEWMAN: How do we cope with that?

WATKINS: In this underclass, there's a sense of hopelessness on the part of too many of our young people today. We find a swamp of confusion in some of these hard-pressed areas, particularly in the large inner cities. We have seen it here in Washington, in Philadelphia and Newark and New York, in Miami and Los Angeles—so many places. This is why I feel that motivational concepts have to be integrated into our health education, health promotion, and education reform: in fact all our approaches need to be integrated in a holistic fashion. Now is the time to grasp that concept and move it. Because, as I indicated earlier to you, the overlay between some of the social issues you mention and the AIDS virus is direct.

NEWMAN: The fact that we have a lot of at-risk kids who are likely—unless we do something fairly dramatic—to be more and more involved with AIDS . . . does that pose a threat to the larger society?

WATKINS: Yes, in my opinion, it does. Let me talk a little bit about adolescents. Not so much late teens, I am talking about now. . . .

NEWMAN: Twelve? Fourteen?

WATKINS: Yes, early in the middle-school period. We know this: sexually transmitted disease is on the climb. At a very steep rate.

NEWMAN: Not just AIDS?

WATKINS: No, no, sexually transmitted diseases of all types: herpes, ghonorrea, syphilis, and so on. Now also in that same group we have a growing number who are experimenting on drugs other than marijuana. Recent studies of high school seniors show that one-third have experimented or are experimenting on drugs other than marijuana. That is very worrisome. Then there is the recorded high sexual activity among adolescents in those same groups. Generally, by the time males have completed their upper-school education, 70 percent have had significant sexual intercourse . . . and 50 percent in the case of the females. Now, you tie that with a seven- to eight-year latency period from time of infection to time of clinical symptom, and you have a very dangerous potential situation. Particularly when the attitudes of adolescents are, "It's not going to happen to me"; "I won't wear a condom anyway—it's not my bag"; "I am not going to be a problem"; "I am going to live forever"; "I can look into my partner's eye and tell whether he or she has AIDS—I already know how to do that."

When you have that kind of thought pattern, as we heard before the Commission in testimony, you have to worry a great deal about effectiveness of any simple intervention strategy, like a mailer. And we don't know what the prevalence is of the virus among adolescents today. We have no knowledge of that. So it is a worrisome thing, because you are talking about potentially significant risks to the future generation. I would say that if I were left with one unknown from this whole nine months of study, it would be, "My God, what is going on among adolescents today?" All those co-factors in the wrong direction—are we building something with the potential to explode three, four, or five years from now? My fear is that we have to be concerned with that potential. Certainly we should take whatever steps we can today to deter such a tragedy from happening. If we look back one day and someone says, "Well, we spent too many resources doing that—see, it didn't happen," then we'll know we did the right thing.

NEWMAN: Right. Let me take you back to something that you mentioned earlier, that health-care professionals do not seem to have anywhere near the understanding that you would have anticipated in this. Does this mean that in the universities and professional associations we are going to have to mount some sort of major educational campaign?

WATKINS: Absolutely. I've been working closely with the hierarchy in the American Medical Association, the National Academy of Science's Institute of Medicine, and many others. I was a speaker at the annual leadership conference of the AMA in Chicago recently; that was followed two weeks later by their first national conference dealing with the entire range of education for all health-care providers, including people like paramedics and volunteers—people who work with doctors in and around the virus. We discovered how important it was to have an aggressive, integrated education policy for all levels of health-care providers. But most of this all has to first start moving down from the medical schools, which, unfortunately, move at a glacial pace when making change.

NEWMAN: I was going to ask you what kind of grade you gave to the medical schools on the kind of changes they've made.

WATKINS: Let me tell you, I won't grade the medical schools, but the medical people themselves assigned about a D plus to their responsiveness to needed change.

NEWMAN: Well, that's up from a D minus.

WATKINS: Well, that D minus was for health education, health promotion in the schools. We're talking about the medical leaders in the nation now . . . even more disturbing.

NEWMAN: Well, there you are—they get much higher grades!

WATKINS: But I will say this of the AMA: its reaffirmation of the Hippocratic oath in relation to AIDS is not an idle gesture but a very important move. I gave their leadership good marks for courage. Because there are many health-care providers—even with that reaffirmation that they'll serve others, that will still refuse to serve those with AIDS. Take the leadership conference I mentioned. After I addressed it, the audience was asked to submit questions to those on the dias, who included the head of the AMA. The questions from the floor included: "Can you get it from a bedbug?"; "Can you get it from a mosquito?"; "What about the toilet seat?"; "What about the man who cuts his finger in the restaurant and blood goes into your salad?"; "What about tear ducts and the tear drops?" All of the old bugaboos that scientists have already reported out: thousands and thousands of AIDS cases worldwide today, but not one case where those methods of transmission led to AIDS. Not one. Well, that fact still hadn't gotten through to the medical leadership.

If you went to your doctor and said, "Doc, tell me, would you treat an AIDS patient?" If he said, "Absolutely not," are you going to believe Watkins, the chairman of the commission that says he should?

Frankly, the AMA's wonderful Dr. Schwartz and Dr. Sammons were embarrassed by it. What they did was gather the questions and then feed them back to their own doctors at the education conference two weeks later. Everybody there was shocked at the lack of understanding. The ignorance is not a criticism of individuals but of a system that is too slow and too sluggish. What you have is rapidly moving scientific information that is changing almost daily about a set of unknowns that is very frightening. So we have to focus on new and dynamic ways of educating health-care providers because they are in the front lines, dealing with the problem.

All professionals count, for that matter, because we look to them for guidance. If you went to your doctor and said, "Doc, tell me, would you treat an AIDS patient?" If he said, "Absolutely not," are you going to believe Watkins, the chairman of the commission that says he should? No, you're going to believe your doctor. Or your dentist, or your pastor, who says that, really, the problem is homosexuality, and we ought to quarantine them all. Those kinds of answers, when they come from the people we trust the most, are going to carry the day. That's why the fundamental education of *all* these individuals is so important . . . why, for example, fundamental education in the workplace is so important. Planning for the first AIDS case before it ever gets there—that's an educational process. We need to work with the infected worker so that morale in the remainder of the uninfected workforce stays up, so that the person stays on the job. After all, carriers are non-clinical symptomatically for seven to eight years. Don't we want them at work? Do we want them on welfare? Do we want them spending down to poverty and to Medicaid? Do we want them demeaned for life? No, we ought to keep them in the workplace. They're not going to transmit that virus. We now know you have to work at it to transmit the virus.

NEWMAN: That raises questions for colleges and universities as well. Certainly we are going to start seeing more and more students on campus, or employees of the university, who have AIDS.

WATKINS: Absolutely. The university should be the very first to leap into the saddle and ride hard on preparing for its first students, its first faculty members, its first support forces with the virus—to demonstrate to others that at least academia has its act together, that it's educated itself and knows how to handle this.

NEWMAN: You're talking about the university as a role model?

WATKINS: As a role model.

NEWMAN: And it should be educating people broadly, because this is going to require a broad education.

WATKINS: Right. And if they do it right, there is a linkage down to the high school, the middle school, the elementary school, and to pre-school that all ties together. Somewhere in that chain we ought to have the anchor, and it's the university that everybody can lean on to build some kind of integrated model that helps youngsters growing up build habits for life that are wholesome and healthy . . . not only for gaining new respect for ourselves but to allow us to respect other as well. It seems to me that it's not a difficult concept to grasp. I know it may be difficult to implement. I'm sure there are enough colleges and universities across the nation that are ready to move that it would make sense to convene some sort of conference now, to start a movement going at the university level for them to do their part.

NEWMAN: Jim, were you encouraged by the Stockholm Conference?

WATKINS: Well, I am encouraged only in the sense that 138 nations were there. Ten thousand papers were delivered, and 7,000 participants were there. So when a person like James J. Kilpatrick says in *The Washington Post*, "What's the big deal?," the answer is in those numbers. It's very important that we all recognize this as a *global* problem. The United States is the major perpetrator of the disease right now, so we'd better not start pointing fingers at Africa or other nations. We're number one in the world. We've got a third of the reported cases. And while there's probably under-reporting elsewhere, we shouldn't hide behind that. So, it's global, and therefore I'm encouraged that people are at last coming out of the woodwork and admitting that they have serious problems. For example, Thailand recently agreed that it had a very serious drug abuse problem, with a direct relationship to AIDS. So these are good things. I mean, the tragedy is not good, but it's good that at least we are airing it across the nations. I believe that if the President picks up and accepts the strategies that the Commission developed, it will go a long way towards inspiring other nations to follow our lead. Because we are a leader in health, we ought to be taking a lead in this epidemic in a cohesive way.

NEWMAN: Jim, this has been a long, arduous battle on your part. What's next for you? And the Commission? What happens now?

WATKINS: Well, it is my fond hope that the President will embrace this as his commission report, that he'll endorse the thrust of it. That he will accept the fact that putting the HIV under protection of the laws for handicapped, the anti-discrimination law, is good for the nation. More importantly, I would hope he'd then make the entire law applicable to all Americans, not just those receiving federal funds. That would be a tremendous step forward. If he embraced it and said, "Look, I will do all that I can to work in a bipartisan way with leadership on the Hill to pass a law that protects *all* handicapped, including those with HIV, and issue an executive order to do so at once in all federal agencies, he would set the right *tone* for the nation." He doesn't need to do much more than that. We'd be underway in our war against the virus.

I can tell you that the goodness is waiting out there, with community-based organizations and people like yourself, and with leadership in schools and PTAs and among teachers across the nation. They are sitting there waiting for their positive energy to be harnessed. If they get the signal to "go," then we'll take off and start doing these things. And so my hope is that he would grasp this as his one important legacy to leave us. He started with "A Nation at Risk," and embraced excellence in education in 1983; in 1985, he spoke out for youth fitness and sports; he's spoken out strongly against abuse of drugs. And now he's got the catalyst in the AIDS virus to push all of this much harder. He's got a perfect combination . . . he's got a strategy already built and a nation ready to move, so I'm hopeful he'll grasp it as his and start moving the nation to something better for all Americans.

I also believe that he needs somebody in charge. We must have somebody identified with overseeing the follow-through on this thing, at least for now until the institutional process can be brought up to a responsive speed. I do not feel that the process is responsive today. AIDS is too fast-moving and needs a much more rapid response system, one that is coupled to the grassroots, to community-based organizations that are carrying so much of the burden. We need fresh approaches in our public hospitals, and to infant AIDS—it just goes on and on, what we need.

For myself, I will always remain sensitive to this issue, because I've been so close to it now for nine months. But because I see it as a broader issue, I am going to dedicate myself even more fully to the whole issue of the youth base of America—its literacy, its health, and its motivation—with "motivation" as the horse before the cart. Unless we start thinking broadly about youth development, by the year 2000, when we have the current first-graders entering our workforce, they are not going to be ready. They are not going to be motivated. They are going to be at-risk still, and in large numbers. And America simply isn't going to be able to accomplish the objectives that everybody is calling for in international competition. We won't have the readiness of the workforce we need. All these issues, as I've said, are raised in how we respond to this epidemic. So I'm going to take the higher ground and stay with American youth and their health and welfare as the most important issue, with HIV and AIDS as a subset—a tragic symptom of a bigger ill. □

Admiral **Watkins**. To conclude, I would take these two added dimensions of comprehensive health education and motivation through youth community service and add them to the concept of education as you are addressing it in your current preschool and postsecondary school recommendations.

On the subject of cost, I think too often we talk about up-front investment and don't bother to take into account the kinds of amortization regimes that are built into a cost-effective program. In the military, when I would come over to Capitol Hill and talk about that, they demanded that we show how we were going to fund all of these new programs: Where are we going to get the money out of existing systems? How do you translate investment dollars today to more cost-effective dollars tomorrow? Isn't there a cost offset?

I think too often we say it's just too hard, when dealing with human potential, it's too difficult. It isn't. About 50 percent of the programs we have in educating and motivating our youth can be costed out by the General Accounting Office or by the Congressional Budget Office, somebody that has the capability to put on the green eyeshades and say, look, there are certain things that we can cost out.

For example, we pointed out in our commission report that we can probably save $9 out of every $10 if we don't institutionalize everybody and shift to a less costly alternate health care concept. There are alternate health care settings, like home care, if we get our antidiscriminatory act together in this Nation and deal with these issues.

I believe that in the existing health and education programs there are dollars that can migrate toward our up-front investment over a 5-year period. We need to start looking beyond the current budget year.

So far as defense is concerned, my feeling is that what we are talking about here is the guts of national security. This is national security. So we can't say, what do you want, defense or an educated youth base? They are the same thing.

Defense has to get into the act, too, and say, "I am so concerned about the readiness of the potential youth base that I am willing to contribute dollars into that account because it is the guts of military readiness." There is no question about this axiom, and every service chief will support it. So therefore let's put some teeth behind the rhetoric and say that all must share the educational restructuring burden.

But those on the domestic side must also share the investment burden and identify the offsetting dollars. To achieve these various objectives, we should set them as national objectives, then force the dollar savings in the outyears that will surely be there as we transition from high-remedial costs of today to lower preventive costs of tomorrow.

I am strongly a believer that we must stop fearing up-front investment dollars without even investigating the downstream amortization regimes which cost-benefit analysts can just as well deal with in at least half of human development programs as well as they can with other programs in hardware and that sort of thing.

With that I want to again thank you for allowing me to be here. Thank you for the breadth and depth of your report of last year. I think it is a wonderful first start, and I would only add these additional elements into your thinking.

In answer to your very basic question, I would make Head Start an entitlement right up front, for preschool health and education preparation of our youngsters should be the first order of business.

Downstream I would be more on Jule Sugarman's side. I believe there are other things we can do now at the baccalaureate level that we are not doing. Until we can eliminate some of these incredibly complex variables of early childhood development, I think it is premature to predict what might happen downstream if we were to get the whole level of education and literacy from preschool up to secondary school on the beam and on track. We may not need the added expense of entitlement to college education.

In lieu of the latter, I would focus our postsecondary programs on incentives for youngsters to get into the kind of social service and other community service we so desperately need out there to deal with the major problems of the elderly, the youth at risk, disadvantaged and the underclass of the Nation.

Thank you.

Representative SCHEUER. Thank you very much, Admiral.

Congressman Pat Williams.

Representative WILLIAMS. Thank you, Mr. Chairman.

I found this panel to be very interesting. Let me make an observation rather than ask a question. I know we are pressed for time, Mr. Chairman, so I will truncate my observation.

From listening to your testimony, Mr. Sugarman, you and I would probably agree on the need for changes, including additional dollars, on the social side of Federal spending patterns.

I find myself in a major personal dilemma, however, as to whether or not America is going to be willing to do that. I see the polls that say that Americans indeed recognize that we need to make significant progress in health care and education, but the only poll that counts is that one that is taken on election day. When it comes to that poll, the vote for the most important office in this land, the American people have said very clearly in three elections in a row spanning a timeframe of more than a decade—no, no, we will not support a President who will ask and demand these kinds of changes we need and who will provide the aggressive leadership to do it.

It is almost as if our country has come to believe that there is no connection between the ballot box and then what happens in Washington and therefore to their own individual lives.

I don't know whether the demand is out there in America to make the kinds of changes you are talking about.

I have spent 6 years on the House Budget Committee. I am unalterably convinced that many of these changes cannot be made without additional expenditures. Some of them can, but most of them cannot. So Americans have two choices. We can either raise their taxes to pay for the changes, or we can cut the aged and defense spending. Either or both. We can raise taxes on the one hand or we can cut defense spending and the aged on the other.

All the nonsense about fraud, waste, and abuse in welfare. We have passed that now in America. We understand now that that was political demagoguery. That is not the way we are going to pay for these massive necessary changes.

I am pleased to hear, Admiral Watkins, that when you had come up here the various defense subcommittees would question the defense spending and ask you about offset. But I can tell you, as a member of the Budget Committee, we will add $1 billion to the defense spending in a heartbeat, but we will debate for a month $100 million more for health care or education in America.

Why? Because we know what happens on that Tuesday in November. We read that poll. That's the one that really counts. That is the dilemma that many of us face here in the Congress. I for one have come to the point where I don't know how to resolve it.

Thank you, Mr. Chairman.

Mr. SUGARMAN. Mr. Chairman, if you will permit one observation on Congressman Williams' remarks.

Representative SCHEUER. Yes.

Mr. SUGARMAN. I think that increasingly those of us who are involved in the systems that help children, the health system, the education system, the social system, plus a lot of people like Admiral Watkins from the outside, are understanding that we need to be very political in our approach to things, that we need to support members like you and the chairman who have fought for years for decent entitlements and decent programs.

Too often we have stood aside and said we don't want to let politics corrupt our programs. Well, if we neglect our political leaders, they will neglect us. I think that balance is going to change. It may not change quickly on Presidential elections, but I think you will see much more support from the general public and from the professionals involved and the advocacy groups involved.

Representative SCHEUER. Thank you very much, Jule Sugarman, and thank you very much, Admiral Watkins, for a very thoughtful and provocative panel.

I will now ask Congressman Pat Williams to introduce the speakers for the next panel and conduct the questioning.

Representative WILLIAMS [presiding]. Thank you.

Will the next panel, Mr. Donley, Mr. Semerad, Mr. MacAllister, Mr. Murphy, and Mr. Woodside, please join us at the witness table.

Edward Donley is chairman of the executive committee of Air Products & Chemicals, Inc. Mr. Donley is a life trustee of the Carnegie-Mellon University and is chairman of the board of members of Lawrence Institute of Technology. He served as chairman of the Business Higher Education Forum of the American Council on Education from 1986 until today.

We are pleased you are with us, Mr. Donley. Please proceed.

STATEMENT OF EDWARD DONLEY, CHAIRMAN, EXECUTIVE COMMITTEE, AIR PRODUCTS & CHEMICALS, INC., AND MEMBER, BOARD OF DIRECTORS, U.S. CHAMBER OF COMMERCE, ON BEHALF OF THE U.S. CHAMBER OF COMMERCE, ACCOMPANIED BY KAREN A. BERG, ASSOCIATE MANAGER OF EMPLOYEE RELATIONS FOR THE CHAMBER

Mr. Donley. Thank you, Congressman Williams.

My introduction contained a few minor inaccuracies, which with your permission I will correct. I have in the past couple of years entered into a new profession; that is, a profession of former chairman. I am former chairman of the U.S. Chamber of Commerce; I am former chairman of Air Products & Chemicals, Inc., a high-tech company with 13,000 employees with headquarters in Allentown, PA; and as you said, also former chairman of the Business Higher Education Forum, a unit of the American Council on Education.

I have submitted a prepared statement of my position, Mr. Chairman and Congressman Williams. With your permission, I will have that stand rather than take up an extensive amount of time.

Representative Williams. Without objection, it is so ordered.

Mr. Donley. I would like to highlight briefly two points in my prepared statement.

One Mr. Brademas referred to, and that is the tax deductibility for student loans and the deductibility of expense on the part of corporations such as our corporation, Air Products, when we send our employees off for further education.

Turning on section 127 and turning it off again and turning it on retroactively creates a lot of confusion. My prepared statement strongly recommends that we make those tax deductible aspects permanent.

There is a true demand, I am convinced, for the loan programs for higher education. In the U.S. Chamber of Commerce we introduced during 1988 a new program called ConSern to provide loans to employees of member companies. In the few months that the program has been in existence, 4,300 companies, members of the U.S. Chamber across the country, have signed on for that program, paid the fees, obtained the literature, and are distributing it to their employees. Already more than 2 million employees in these 4,300 companies have signed on for getting information about this program. These are mostly small companies with less than 500 employees.

We have provided in the few months that the program has been in existence over 6,000 loans, totaling in excess of $40 million, to employees of these 4,000-odd companies.

That is the essence of the comments I would like to make about the prepared statement that I presented. However, with your indulgence, I would like to take a very short time and bring to your attention an education program in which I have been personallly involved in the past 2 months.

This President, as has been said many times this morning, has identified himself as the education President. I hope that this Congress will identify itself as the education Congress. I think there are some opportunities without federally funded programs to make contributions in this area.

I happen to be the cochairman of a small charitable foundation in Pennsylvania. Four months ago we offered to two school districts in Lehigh County a program which would make available to every teacher who would come forth with an innovative program agreed upon by the teacher and the students in the classroom a grant of $1,000 for carrying out that program. We received an overwhelming response. We made 150 grants, that is, $150,000, which is, of course, a minuscule expenditure. The annual budget in these two school districts is in the aggregate substantially in excess of $50 million, so $150,000 is not significant.

These teachers and their students have grasped this program, which puts this minor amount of money into the classroom, with great alacrity. They organized a fair held at Muhlenberg College. The teachers and their students came and presented an outline of what they were doing in an innovative way in their individual classrooms. The local media including the press, the radio stations, and the television stations, picked up this program and it has received a great deal of very enthusiastic attention in our community.

We announced last week that we were going to extend it for another year. My telephone has been ringing off the hook ever since as teachers and students call and express their great enthusiasm for this program that gives them some money in their classroom, even though a minor amount, and that they have under their control.

There is absolutely no question that many of these innovative programs are going to be so well received and so highly admired in the community that the school districts are going to have to fund them on an ongoing basis.

So I say that you here in the Congress, under your leadership, Mr. Chairman, have a bully pulpit, as does the new President. I hope that you will use that bully pulpit to advocate the kind of private initiative that I think exists out there in the country to a great degree but needs to be stimulated and encouraged by the voice that can come from this chamber and from the chamber at the other end of Pennsylvania Avenue.

Thank you very much.

[The prepared statement of Mr. Donley follows:]

PREPARED STATEMENT OF EDWARD DONLEY

ACCESS TO POSTSECONDARY EDUCATION

Mr. Chairman and members of the Subcommittee, my name is Edward Donley. I am Chairman of the Executive Committee of Air Products and Chemicals, Inc. I serve on the Board of Directors of the U.S. Chamber of Commerce and was Chairman from 1986-1987. I am pleased to appear today on behalf of the Chamber. I am accompanied by Karen A. Berg, Associate Manager of Employee Relations for the Chamber.

Mr. Chairman, the Chamber applauds you for holding this hearing on the important topic of assuring full access to preschool and postsecondary education. The Chamber is committed to the goal of making high-quality education available to all segments of the population and appreciates the opportunity to present its views, which will focus on postsecondary education.

The chance to participate in this debate comes at a propitious moment in our history, as we prepare to enter the 21st century. Current international competitive pressures suggest that a thorough review of national budget and tax policy is appropriate and timely if we are to meet this country's future human resources needs. The 101st Congress and the new Administration must take steps now to ensure that tomorrow's work force has the education and training necessary to meet the work-place needs of the year 2000.

Much of the U.S.'s ability to retain its competitive edge in a global economy is contingent upon providing the broadest access possible to education. Coinciding with increased competition from abroad are fundamental changes in both the industrial structure of the U.S. and the composition of its labor force.

On the demand side, high-skill jobs are the wave of the future. Bureau of Labor Statistics projections to the year 2000 indicate that the greatest growth will occur in occupations and industries demanding high-skilled, well-educated workers. In Workforce 2000, the Hudson Institute forecasts that by the 1990s more than half of all new jobs will require some education beyond high school and that 30 percent of those jobs will require a college degree.

On the supply side, the labor pool is shrinking and will continue to do so through the year 2000. In addition, 80 percent of those who will be working the year 2000 are working today. We must focus not only on the education of our youth but also on the need for workers to continue learning throughout their lives in order to keep pace with a rapidly changing work place.

A new report from the Business-Higher Education Forum, the Executive Committee of which I am a member, makes the case eloquently:

> "Unless we can make all our young people believe they are partners in our national life, we may lose not only them, but the future we want for them. The real issue for our society is how do we make available for all our young people — male and female, minority and majority — a sense of the possibilities of life, faith in themselves and enough confidence to stake their future on developing their talents?"

Meeting these needs and fully developing our human resources will require a new focus on education — including higher education. One of the greatest impediments for those seeking higher education is the high cost. According to a study by the College Board, college costs have soared since 1980. Private universities registered the highest cost increases, with the average charge for tuition, room, and board rising 80.8 percent to $11,870. Costs at public two-year colleges, which showed the least growth, rose 56.4 percent to an average of $3,160.

Although the government funds several educational aid programs to assist the poor, the grim fact is that education is increasingly beyond the reach of the middle class. At present, 25 percent of college students receive federal aid, but 60 percent of college students are ineligible for aid.

A recent Gallup poll asked 1,000 junior and senior high school students, high school graduates who have not gone to college, and college students and graduates about deterrents to college enrollment. Almost half — 48 percent — of those surveyed responded that the key deterrent is the price.

Changes in the tax code have made financing the cost of a college degree even more difficult. Under the Tax Reform Act of 1986, the deduction for interest on consumer loans — including educational loans — is being phased out. In addition, the tax exemption for employee educational assistance (Section 127 of the Internal Revenue Code) will expire on December 31, 1988.

I would like to focus my remarks on the Chamber's perspectives on ways to address access to higher education. The Chamber supports a three-prong approach to financing higher education: permanent extension of Section 127, restoration of the deduction for interest on student loans, and examination of education savings incentives.

Employee Educational Assistance

In 1978, employee educational assistance programs became tax-exempt through the creation of Section 127 of the Internal Revenue Code. The underlying Congressional intent for the enactment of Section 127 was "to provide greater educational and economic opportunity to those who have had limited access in the past and who are least able to pay . . ." by excluding from gross income the value of employer-provided educational assistance. Seven million workers have benefited from participation in such programs since 1978.

However, the authorization for Section 127 has lapsed three times since enactment and subsequently has been extended retroactively. Last month, the President signed into law tax legislation that included a one-year extension of Section 127, retroactive to January 1, 1988. But on December 31, 1988, the exemption lapses again. The Chamber supports permanent extension of Section 127 to alleviate the confusion and delays caused by the piecemeal authorization process.

Studies indicate that Section 127 has played an important role in meeting the training and educational needs of the American work force. According to a 1985 survey conducted by the American Society for Training and Development (ASTD), 97 percent of all respondents had educational assistance programs; 96 percent of their employees were eligible to participate; and 72 percent of the participants earned less than $30,000 per year. In fact, employees making less than $15,000 per year participated at twice the rate of higher-paid employees. Small- and medium-size organizations made the greatest use of educational assistance programs — the highest participation rate was found in organizations with fewer than 500 employees. Ninety-one percent cited local community colleges as the primary provider of related courses.

The ASTD survey clearly indicates the following trends:

o educational assistance benefits are offered by a broad and diverse cross section of employers;

o Section 127 provisions are used by employees at different compensation levels, with the highest concentration in the low-to-middle income range;

o Section 127 allows employers to offer cost-effective programs for upgrading the skills of employees; and

o educational assistance programs encourage workers (and employers) to keep up with new technology and industrial developments.

These conclusions are reinforced by the findings of the Chamber's Survey Center: Employee Benefits (1988) revealed that more than 70 percent of all firms provided employee educational assistance benefits in 1987, almost double the 37 percent of firms offering this benefit 15 years ago. All major industry groupings provide this benefit.

Employee educational assistance benefits companies, their employees, and society generally. However, the short extensions and continual expirations of this program cause a great deal of confusion about the tax treatment of employee educational assistance.

In the absence of Section 127, employers must revert to a "job relatedness" test in order to provide tax-free education and training assistance. This results in a greater benefit for higher-income, better-skilled employees, who more easily may justify educational expenses as job-related. If courses taken are not job-related, workers must pay income tax on the value of the assistance, which may discourage some employees from continuing their education.

Currently, with the future tax status of educational assistance so uncertain, both employers and employees are left guessing about how tuition reimbursement should be calculated. Permanent extension of Section 127 would alleviate this uncertainty.

Student Loans

Loans are the largest source of student assistance. Last year 3.5 million students took out government-guaranteed loans, borrowing an average of $2,381 each. Countless others secured loans through the private sector.

A recent study found that 43 percent of graduates of four-year institutions complete college with education debts averaging $5,500. About one of every three graduates employed full-time is using 6 percent or more of his earnings to repay an educational loan.

Until recently, interest on student loans (as well as all other consumer loans) was tax deductible. Under the Tax Reform Act of 1986, this deduction is being phased out over five years. Educational loan recipients preparing their 1988 tax returns next year may deduct only 40 percent of the interest paid on their loans. By 1991, the deduction will be eliminated.

Congress justified the repeal of this deduction on the grounds that it is a disincentive to savings. But in the face of rapidly escalating higher-education costs, many American families are finding that saving enough to educate their children is difficult, if not impossible.

Interest on loans secured by a primary or secondary residence and used for educational expenses remains deductible. But this does not help those who do not own homes — primarily lower-income taxpayers — or those who lack sufficient equity in their homes. It is estimated that nearly 40 percent of all Americans fit into this category. Clearly, this is an unfair situation.

Reinstatement of the deduction for interest on educational loans would make the tax code fairer for Americans who must borrow to meet higher-education expenses. Further, it would help to make education more affordable and, thus, open more opportunities for individuals as we approach the 21st century.

The private sector also has an important role to play in ensuring the availability of high-quality education and training programs for current and future workers. This year, the Chamber adopted the ConSern program, which makes low-cost educational loans available to employees of all Chamber members and their families. There are no means tests; the only qualification is the applicant's good credit. Loans are made up to $25,000 per applicant per year to a maximum of $100,000, with up to 15 years to repay. These loans are made for any and all educational purposes and may be used at any accredited college, university, or private elementary or secondary school. For many middle-income families, ConSern may bridge the gap between federal student loan eligibility and the economic realities of sending one or more children to college.

This is not the Chamber's first effort to assist in our nation's quest for better educational opportunity, nor will it be its last. I do, however, believe that this is its most dramatic contribution to date; and if the response thus far is an indicator of what is to come, it will have a major impact indeed. To date, 4,300 companies representing more than two million employees have participated in the ConSern program, which has provided some 6,000 loans totaling $40 million.

Savings for Higher Education

We must examine creative methods to help parents to save for their children's education. The Gallup poll that I mentioned earlier found that more than one-third of those surveyed had saved no money for college, nor had their families. With continuously rising higher education costs, savings will become an increasingly important element.

A number of education savings programs have been proposed and the Chamber currently is undertaking a comprehensive review of all education funding mechanisms. The Chamber's Board soon will be asked to approve policy regarding tax incentives for education savings.

Tax legislation enacted at the close of the 100th Congress created a new savings incentive program. Under this plan, interest received on EE U.S. savings bonds redeemed for college costs is tax exempt.

Other proposals include education savings accounts, similar to individual retirement accounts (IRAs), which would allow families to contribute a certain amount each year solely for the purpose of financing higher education. Contributions up to a limit would be deductible from gross income. A similar proposal would allow penalty-free deductions from IRAs to pay for higher-education costs.

The Chamber's Education, Employment and Training Committee has recommended several critieria for evaluating tax incentives for education savings. "Any new tax-favored savings vehicle should:

- not establish complex rules and regulations or create a new government bureaucracy;
- ensure voluntary participation by employers; and
- establish a convenient savings vehicle."

Conclusion

There are costs involved with each of these tax incentives for higher education. But I would maintain that there may be no better investment for business — indeed for our country — than education.

Employer interest in improving access to higher education is primarily prompted by economic concerns. The economic well-being of American business is tied directly to the educational attainment of our citizenry. But the importance of education in our society goes beyond economics. The report by the Business-Higher Education Forum, to which I referred earlier, reminds us: "It is essential that our people understand the human resources issue as an opportunity for all to lead a better life — not solely in material terms, but in the matters of the spirit and of the values that bind us together . . . . Growth, freedom and a better future for all depend on adapting our human resources to ever new and ever more challenging times."

Representative **Scheuer**. Thank you very much. Congressman Williams is coming back to continue the management of this panel.

I do hope that all of you, from your business vantage point, will tell us what the long-term cost to our country will be of not improving access to postsecondary education, of failing to provide adequate on-the-job training and retraining and upgrading of skills, and the cost of not providing a preschool education opportunity for all the kids that need it.

Congressman Williams.

Representative **Williams**. Mr. Roger Semerad is senior vice president of American Express. The American Express Co. has proposed the creation of the National Academy Foundation, a partnership among business and education, government and labor aimed at providing critically needed leadership and resources to improve the education and career preparation of the next generation of Americans.

Mr. Semerad, we are glad that you are here. Please proceed.

STATEMENT OF ROGER D. SEMERAD, SENIOR VICE PRESIDENT, AMERICAN EXPRESS CO.

Mr. **Semerad**. Mr. Chairman, thank you very much.

I would like to join the other witnesses in congratulating you and the subcommittee for this series of hearings and certainly those that have come before. Jim Watkins and I were talking before the hearing that this is our third appearance before this subcommittee. It is really critical that the subcommittee focus on those human capital issues that are facing this country.

Unfortunately, Lou Gerstner, the president of the American Express Co., was unable to join us because of another corporate obligation. He sends his best regards for a good hearing.

In the interest of time, I would like to just outline my prepared statement which I have submitted in full for the record.

Representative **Williams**. Without objection, it is so ordered.

Mr. **Semerad**. Even though the United States enters 1989 in the middle of one of the longest noninflationary economic expansions in our history, one of the most urgent tasks facing us is restoring America's productivity. Our overall productivity growth relative to that of our major economic competitors ranks dead last.

There are two main contributors to productivity growth of any nation, and that is the national rate of savings and investment in the education and training of our workers. All of you are aware of our dismal savings performance.

I really want to discuss this morning the second half of the productivity equation, the education and skills of our work force.

Historically, some one-half of American productivity growth has come from increases in individuals' skills and knowledge. Yet as this subcommittee has learned over the last couple of years in these hearings and in its research, the skills of our current work force and the knowledge of our society as a whole are dangerously low already and they seem to be headed even lower.

Clearly something needs to be done. Unfortunately, those people most in need of added education and training generally cannot take on this responsibility by themselves. Yet trying to upgrade worker and student skills by spending vast new sums of Federal dollars would worsen the savings side of the productivity equation.

We should instead make better use of existing and potentially available Federal, State, and private resources by restructuring financial assistance for postsecondary education and training. In essence, build a new mechanism according to what I would outline as six principles.

The first would be that the financing mechanism should encourage savings. Two, that it should encourage devotion of increased personal and other private business resources to education and training. It should encourage all students to seek postsecondary or needed training, starting young.

Throughout their worklife it should encourage personal achievement and philanthropic support of that achievement in education.

It should be centered on the individual and should encourage choice and efficient operation of markets.

And it should be administratively simple.

Is such a program possible? I believe that it is. I would like to suggest one approach as a starting point for discussion.

I would ask the subcommittee's indulgence. This doesn't have all the details of such a thing worked out. It is basically a conceptual outline that would change the conversation on how we approach this whole problem that everybody says we have and as we have heard this morning in various pleas for increasing sums of money going to entitlements and other things. Let me just propose another way that we might begin to focus available resources.

I call this mechanism an education and training trust account.

The education and training trust accounts would be tax-exempt savings accounts with three special elements.

Parents or the individuals themselves could set up these accounts at any financial institution, just like a normal savings account, at almost any point in their life, from time of birth to the end of the working career. Subsequently, contributions up to a legally allowable amount could be made to the accounts, fully tax free, by parents, the intended individual beneficiaries themselves, or third parties.

Companies also could make tax deductible deposits for worker training and reeducation, and current Government credits, such as those for military service, could be rolled into these accounts.

In order to prohibit tax sheltering, the funds in the account could only be used for the designated individual's postsecondary education and training at accredited institutions. However, funds could be withdrawn at any time in the person's life, making the money available for midcareer retraining and/or return to school, as well as for college attendance immediately after high school.

Second, upon graduation from high school or a comparable certified program, the Federal and perhaps State Governments would grant each student a basic education award with bonuses given for superior performance on a national standardized achievement test.

These awards would not be in the form of cash, but instead would be credits to his or her education and training trust account that permitted the student to draw upon the indicated amount of Federal resources when he or she attended school. The basic award size would be keyed to 2 years' worth of tuition at the lowest cost public higher education in the State, but the actual grant amount would be determined by a number of factors, with students from low-income families automatically receiving the maximum and more financially capable students receiving less.

Structured in this way, the education and training trust accounts would guarantee every academically capable student access to at least a minimum cost college education. Yet by providing aid in the form of credits, the program would keep immediate Federal expenditures under control.

Third, in cases in which the amounts in the fund, including parental and third party contributions as well as those from Government, did not cover the full cost of an individual's education or training, the trust account could serve temporarily as a debit account for these expenses; the debt so incurred would be partially guaranteed by the Government so that institutions could be insured against most of their risk.

Persons using their accounts in this fashion would pay market interest rates on the outstanding balance and would make payments into the account on a monthly basis beginning the year after the education or training was complete, just like a credit card or a personal line of credit.

However, a number of features would be added to the repayment provision for the trust account debt to minimize discouragement from debt overhang. Most importantly, repayments would be made contingent on the borrower's ultimate income, so that those incurring debt would never have to spend more than a small fixed percentage of their earnings to make a monthly payment on their account. Any debt remaining after a preset payment period would be absorbed by the Federal Government.

Third, borrowing limits would be established and could not be exceeded without prior debts having been extinguished.

Finally, the trust accounts would be directly integrated into the income tax system, as IRA's and Keogh accounts are now, in order to reduce debt collection and nonrepayment problems.

Taken together, these three elements of the education and training trust account would go a long way toward streamlining America's financing of postsecondary education and training, hopefully resulting in a more effective system for investing in our future work force at little or no additional cost.

In particular, because of the program's universality, all other Federal education and training assistance programs for individuals could be combined into or linked with the trust account program, leading to substantial programmatic and administrative savings. As an added benefit, the long-term nature and savings account-like features of the education and training trust would boost total private savings, would raise the national savings rate and thus improve this other equally critical side of the productivity equation.

Most important, however, the education and training trust account would benefit the people most in need of help. It would give every student throughout their worklife, regardless of income or background, a decent shot at a good higher education or advanced training and an economically rewarding life.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Semerad follows:]

PREPARED STATEMENT OF ROGER D. SEMERAD

"An Education and Training Trust"

The United States enters 1989 amidst both favorable and ominous ecomonic conditions. On the positive side, the American economy appears to be robust and well-equipped for the challenges of the future. We are in the middle of one of the longest economic expansions in our history, with more than 17 million new jobs having been created since it began, six years ago. Both inflation and unemployment have declined sharply, and are at or near their lowest levels in a decade and a half. And U.S. industrial capacity continues to grow.

But the news is not all good. We continue to face monumental budget and trade deficits, and seem unable to do much about either.. The value of the dollar has fallen, and may continue to decline. And interest rates have only recently begun to climb. While the economic gains of the past six years are real and substantial, they may not persist unless we deal successfully with these underlying economic problems -- and soon.

One of the most urgent tasks in this regard is restoring U.S. productivity. While productivity -- particularly in manufacturing -- has risen somewhat in recent years, America's overall productivity growth relative to that of our major economic competitors ranks dead last. U.S. output per worker has risen by an average of only one percent over the last ten years. That is one-sixth of the rate of productivity growth in Korea, one-third that in Japan, and only one-half that in West Germany and Great Britain.

Largely because of our overall productivity problems, we have lost the global lead in manufacturing, and have turned from a creditor into a debtor nation -- the world's largest. Our trade deficit now stands at a staggering $170 billion. Entire American industries, such as memory chips and televisions, have simply disappeared, or nearly so. Others soon may follow.

Dangerously Low Workforce Skills

There are two main contributors to the productivity growth of any nation: the national rate of savings and investment and the education and training of its workers. In both areas, the U.S. has begun to suffer, and the prospects for the future are, if anything, even worse.

Many economists have commented on our dismal savings performance, and all of you are well aware of this problem. I want to focus instead on the second half of the productivity equation -- the education and skills of the workforce. Historically, some one-half of American productivity growth has come from increases in individuals' skills and knowledge. Yet the skills of our current workforce and the knowledge of our society as a whole are dangerously low already -- and they seem to be headed even lower.

For instance, the problem of functional illiteracy -- the most obvious sign of low job skills -- is quickly reaching new depths. As long as a century ago, a larger proportion of the American population had better reading and writing skills than is the case today. Indeed, as a percentage of the population, there are more functionally illiterate adults in America than there are in any other industrialized nation. While Great Britain, West Germany, Canada, France, Japan and Korea can claim between 97 and 99 percent literacy rates, the most optimistic estimate for the U.S. is only 80 percent.

Yet a large share of those who are functionally illiterate are part of the American workforce, and they will continue to be for some time. Most of those who will be working in the year 2000 -- an estimated 85 percent -- are already in the labor market. If these functionally illiterate persons are unequipped for current jobs, they will be even less equipped for those of the future, when much greater workplace skills will be demanded. And even of the majority of current workers who *are* functionally literate, most still will need some form of an educational and training booster shot during the course of their careers if they are to remain as productive as they are now.

Similar ailments abound as well at the preparatory levels. More than four million Americans under age 25 are high school dropouts; almost a quarter of kids who enter high school each year do not graduate. Of those who do graduate, barely half go on to college. Moreover, an estimated 700,000 high school graduates each year -- nearly a third of the total graduating class -- cannot read and write at a level sufficient for them to function in society. Their math skills are equally deficient. In a recent worldwide algebra test, for instance, U.S. high school students ranked 14th out of 15 countries' students who were examined.

These are the kids who will join the workforce between now and the year 2000. It is not an encouraging prospect. Education Secretary Lauro F. Cavazos has cited studies demonstrating that more than half of these students may be unprepared for jobs requiring technical skills. What's worse, without increases in their basic skill levels, they may not even be able to benefit from task-oriented on-the-job training, making vast segments of the future labor market not only unqualified but unqualifiable for the largest share of jobs.

Clearly something needs to be done. Many of our current workers need to be trained or retrained in order to enhance or upgrade their skills, and those young people who are in school need to get more or better education. A superior high school education is a must. But for the future, a college education or some other form of advanced training probably also will be required, at least in most cases. As the Hudson Institute study *Workforce 2000* documented, the greatest job growth in the future will be in the high-skilled professions, and the least growth in the low-skilled areas.

We will, in short, need more people in the laboratories and fewer on the production lines. For instance, by the year 2000, the country will need an additional 192,000 electrical engineers, another 251,000 computer systems analysts and an additional 376,000 accountants and auditors -- all representing increases of from 40 to 75 percent. By contrast, there will be a net rise in the number of jobs for operators, fabricators and laborers of only 2.6 percent. Thus, without increased training and education of the current and future workforce, there will be a severe mismatch between job needs and job skills by the turn of the century -- with serious implications for U.S. productivity and economic performance.

The Affordability of Education and Training

Unfortunately, those people most in need of added education and training cannot take on this responsibility by themselves. A *USA Today* survey of high school graduates last spring found that one-third had delayed or indefinitely put off college because of the expense. This should not come as any surprise. Over the last decade, college costs have risen at nearly twice the infation rate -- to an average of some $10,000 per year for tuition, room and board.

Defraying these costs is an immense burden for all but the most well-off. Many middle-class families cannot obtain college loans because they do not qualify as financially needy. Particularly for those families already supporting one child in college and wishing to send another, the expense may be financially unbearable. Furthermore, those students who *are* able to secure standard loans for higher education must pay these loans back within ten years after leaving or completing school; this creates a massive financial burden for the student who must mortgage a sizable portion of his or her future for the sake of obtaining an education. Facing this onerous burden, many students become discouraged from pursuing higher learning, especially poorer ones who may believe that they have less chance of being accepted to college or that the effort will not be financially worth it to them in terms of higher wages over the long run.

Many of those already in the workforce also are discouraged by the formidable cost of pursuing additional -- and often much-needed -- training. Because both spouses must work in most households in order to keep the family economically above water, training is often a financial impossibility, since it not only would require direct outlays but also deprive the family of at least part of its current earnings. And while a number of larger companies provide funding for employee training, many small and medium-sized firms, which employ the lion's share of American workers, either do not or cannot afford to offer such training on their own.

The effect of these difficulties is to reduce the amount of higher education and training that both young people and experienced workers receive, which in turn helps keep U.S. productivity from growing as fast as it should for us to keep up with our competitors.

And, unless the methods used to increase student and worker access to advanced training are revised, these conditions are almost certain to persist well into the future.

The Question of Expanded Programs

One simple answer that has been suggested to these educational and training deficiencies is to vastly increase federal funding for existing programs, to broaden or universalize eligibility and, where necessary, to create large new programs. These steps would be aimed at ensuring that any student or worker could get as much money for training or education as he or she feels was necessary. However, like most simple answers, this one is apt to be wrong, and perhaps dangerously so. In the first place, trying to upgrade worker and student skills in this way -- that is, by spending vast new sums of money -- would run directly counter to the savings rate problem: it would raise the federal deficit and increase the total level of national dissaving. As a result, any longer term gains in productivity that came about due to increased federal funding for skills training could well be offset by *declines* in productivity stemming from an even lower net national saving rate. As important as education is to the nation's future, we cannot go about trying to improve it while ignoring the negative effects of higher spending on overall economic performance.

But there is a second, more fundamental problem with this approach. Merely expanding federal programs may not increase actual *participation* in high-quality higher education and training programs -- which is, after all, the goal of such spending. For instance, the creation of Pell Grants during the Nixon Administration led to nearly six times as much means-tested financial aid being made available in 1974 as in 1969, a development that almost surely played a role in the rising black college enrollment rates from the late 1960s to the mid-1970s. But these enrollment rates started to decline after that, despite the tremendous expansion of the guaranteed student loan program and other federal educational assistance programs under President Carter. And these lower levels of entrance into college have persisted during the Reagan years, even though total grant aid rose by 14 percent after inflation over the years 1981-87. Similarly, despite a few notable successes, boosts in funding for federal job training programs have not always led to equivalent increases in enrollments and graduations from the programs, especially among the least skilled.

Nor is it necessarily the case that America does not spend enough in total on education. On the contrary, education and training accounts for one of the largest single annual expenditures in the United States. Preliminary estimates by the Department of Education's Center for Education Statistics for the 1987-88 school year show that we spent a total of $308 billion on federal, state and local education programs. Approximately $24 billion in federal, state and local funding goes to such educational assistance initiatives as Pells Grants, defaults and interest differentials in the Guaranteed Student Loan Program, veterans' education programs and others. Governments at all levels spend some $4 billion per year on job training partnership programs, while American companies, according to the American Society for Training and Development, spend at least $30 billion annually to train and retrain their employees. Finally, American individuals, by the estimate of the American Council on Education, paid for 70 percent of a total of $70 billion in college education costs last year, or $49 billion. Thus, in total, the American people spend some

$415 billion each year on education and training -- a third more than we spend on national defense.

To be sure, much of this total education funding goes toward the costs of elementary and secondary education, where, given the existence of free universal public education, the concern is less with financing and affordability and more with the quality of schooling. But even for programs directly related to higher education and training, where access and affordability are more pertinent issues, the substantial amounts of money devoted to these purposes is not always spent wisely. In spite of clean-up efforts during the Reagan Administration, for example, billions of dollars are still lost each year in incorrect grant payments and defaults on student loan payments, often by those with ample ability to pay. Hundreds of millions of dollars are drained away simply to administer educational assistance and related programs in scores of federal, state and local agencies; the federal government, for instance, runs 22 seaparate training programs, all with their own administrative overhead. State, local and private assistance programs number in the thousands, but the amounts awarded often are too small on their own to do much good. And parents, the greatest resource for financing higher education, usually do not begin to save for its cost until their children are in high school, when too little time remains to accumulate enough money for four years of college.

This collection of problems poses severe enough financial strains on middle-class families, who typically find it difficult to pay for their children's college and complain, often with much justification, about how little assistance is available to them from government or other sources. But these problems are literally overwhelming for most poor and low-income working families. Even with access to some federal assistance, they still may not have enough resources of their own to be able to afford post-secondary education or training. And they also may be more likely to feel that the possible gains in lifetime earnings from more education do not outweigh the very real prospect of taking on a heavy debt burden or the cost of foregoing four or more years of full-time income even in a low- or moderate-pay job.

Hence, the inadequacies of the nation's current means of financing access to higher education and training not only impede our ability to boost productivity, but impose a very great cost on individuals and families as well. As long as these inadequacies exist, the most underskilled and undereducated students and workers are unlikely to get the education and training "booster shots" they will need in order to become productive members of the U.S. economy over the next several years.

Some Principles for Reform

While these problems suggest that we need to change our system of financing higher education, we should not expect to be able to reverse all of America's productivity, savings, or skills deficits with such reform. We can, however, help a substantial number of people -- and, in the process, improve the other part of the productivity equation, savings -- if we follow a few basic principles in designing reforms of higher educational and training assistance:

- ***The financing mechanism should encourage savings.*** While new or increased federal funding should not be ruled out, the emphasis should be placed on making better use of existing funds and, in particular, doing so in a way that promotes private savings. This means that we should endeavor to fund more of higher education with savings and less with borrowing. Achieving this objective would make skills and savings enhancement mutually reinforcing, rather than contradictory as they typically are now.

- ***The financing mechanism should encourage devotion of increased personal and other private resources to education and training.*** No federal government program could provide enough money to pay for all of every person's higher education or training -- nor should it. The recipient, who benefits most from increased knowledge and skills, should in most cases ultimately bear the largest share of the cost. But most current financing mechanisms are at best neutral to personal or private contributions to education and training, and some, such as inadequate enforcement of GSL paybacks, actually may discourage individual contributions. In order to generate the most funds for skills and knowledge enhancement, federal assistance wherever possible should actively encourage personal and other private contributions. In other words, federal assistance should act as a kernel of support with a "multiplier effect" on contributions from other sources.

- ***The financing mechanism should encourage all students to seek post-secondary education or needed training.*** Raising the total of government and private resources devoted to education and training should increase access to these services. But any reform of financial assistance should go beyond aggregate improvements in access to specifically increase both actual and perceived access on the part of those currently most discouraged from taking part in higher education and training -- particularly the poor and minority group members. To this end, the same financing structure should be available to all students or workers, so that the poor are not singled out for special programs; however, because of the inherent limitation of available government funds, resources should be targeted most heavily on the neediest. It should be clear to individuals and a matter of national policy that every qualified student or worker, no matter what his or her background, should be financially able to attend college or training, so that all people are aware that they are assured such an opportunity. Moreover, the repayment of any loans should be made income contingent so that students -- especially those planning to enter less lucrative fields -- would not be discouraged from attending college merely by their having to assume a large debt obligation.

- ***The financing mechanism should encourage personal achievement and philanthropic support of education.*** Wherever possible, the means of financing also should encourage such positive behaviors as superior academic performance and explicitly allow for private third-party support of education and training.

- ***The financing mechanism should be centered on the individual, and should encourage choice and efficient operation of markets.*** One critical way of reducing program costs and ensuring that the highest levels of benefits flow directly to recipients is to place as much decision-making authority in individual hands. Doing so not only reduces administrative overhead, but also increases the sensitivity of the program to costs and opportunities in the marketplace. But the cost-savings that greater sensitivity to educational and training markets could bring about would not be fully realized if the program distorted true market costs. Thus, assistance to individuals that alters market prices, such as interest rate subsidies, should be replaced by market-neutral assistance, such as direct grants.

- ***The financing mechanism should be administratively simple.*** It should go without saying that the simpler a program's administration, the less administrative overhead will be involved and the easier it will be to enforce compliance with the program's provisions, such as repayment of loans. But there is another, potentially more important benefit to administrative simplicity. It has been suggested that one of the main reasons many students are discouraged from applying for federal education aid is the complexity of the application forms -- second only to income tax forms in terms of their tediousness. A greatly streamlined financial aid mechanism could help ensure that more needy students received aid while, because of easier enforcement and lower default rates, doing so within an equivalent cost.

The Education and Training Trust Concept

Establishment of a new federal financial aid system for higher education and training that partially or fully met each of these criteria would go a long way toward increasing access to these services, boosting long-term workforce skill levels, and promoting savings and productivity growth -- all within a fairly limited budget. Is such a program possible? I believe that it is, and I would like to suggest one approach as a starting point for discussion. This is an approach that could revolutionize the financing of higher education and training, bring a large number of new participants into the process either as contributors or as college or training enrollees, and yet do so within a manageable cost. Although the details are still being worked out, I would like to share with you the outlines of such a proposal, which I call an Education and Training Trust Account.

The ET Trust Accounts would be tax-exempt savings accounts with three special elements. Parents or the individuals themselves could set up these accounts at any financial institution -- just like a normal savings account -- at almost any point in the person's life, from the time of birth to the end of the working career. Subsequently, contributions up to a legally allowable amount could be made to the accounts, fully tax-free, by parents, the intended beneficiary or third parties. Thus, if the account were opened soon after the birth of a child, parents could ensure that a sizable fund had been built up by the time the child was ready to attend college, and would have a mechanism for spacing regular payments from monthly income for children's education costs rather than facing the monumental lump-sum payments now required.

Companies also could make tax-deductible deposits for worker training and re-education, and current government credits, such as those for military service, could be rolled into the accounts. In addition, companies, civic organizations and other groups that currently offer college scholarships instead could make contributions to the ET Trust Accounts. Perhaps most important, the program would open up vast new opportunities for public-spirited individuals and corporations to invest in *people*, not for the sake of direct personal gain but for the long-term benefit to society. In recent years we have witnessed such cases as that of Eugene Lang, who promised a class of sixth-graders that he would pay for their college educations if they performed well in high school. The trust account program would give many other Americans the chance to do this on a much larger scale.

In order to prohibit tax-sheltering, the funds in the account could be used only for the designated individual's post-secondary education and training. All monies deposited in the account would remain there until paid directly to an accredited educational or training institution, and could not be collateralized, assigned or otherwise attached. The same would be true of interest accrued on the account. However, the trust accounts would be held in the individual's name, rather than any institution's, and thus would be completely portable. Funds could be withdrawn at any time in the person's life, making funds available for mid-career retraining and returns to school as well as for college attendance immediately after high school. And when withdrawn, the funds again would be tax-exempt for the individuals using them.

Second, upon graduation from high school or a comparable, certified program, the federal government would grant each student a basic education award, with bonuses given for superior performance on a national, standardized achievement test. These awards would not be in the form of cash, but instead would be credits that permitted the student to draw upon the indicated amount of federal resources when he or she attended school. The basic award size would be keyed to two years' worth of tuition at the lowest cost public higher education in the state, but the actual grant size would be determined by a number of factors. For instance, students from low-income families automatically would receive from 80 to 100 percent of the basic award, depending upon test scores. Grants for more financially capable students would be less, and would be based in part on the family's history of contributions. While no family would be required to contribute to the trust account, those that set aside a proportionately greater share of their income over time would receive larger awards.

Structured in this way, the ET Trust Accounts would guarantee every academically capable student access to at least a minimum-cost college education, and would make the best use of limited federal funds in the process. The largest grants would be reserved for the poorest students and for those whose families make the greatest relative effort at saving for college. In addition, since the awards would be given only to graduates of high school or the equivalent, the program should persuade more kids to finish school, and might even draw some back in who already had dropped out. And the performance-based aspect of the grants would ensure larger awards to students who study harder -- another activity that sorely needs to be encouraged. Finally, by providing aid in the form of credits, the program would keep immediate federal expenditures under control.

Third, in cases in which the amounts in the fund, including parental and third-party contributions as well as those from the government, did not cover the full cost of an individual's education or training, the ET Trust Account could serve as a temporary debit account for these expenses. The debt so incurred would be partially guaranteed by the government, so that institutions could be insured against most of their risk. Persons using their accounts in this fashion would pay market interest rates on the outstanding balance, and would make payments into the account on a monthly basis beginning the year after the education or training was complete -- just like a credit card account or personal line of credit. Thus, students not accumulating enough money from historical contributions or government grants, those wanting to attend a more prestigious and hence more expensive college or those wishing to go on to graduate school would be able to do so, but would have to assume the added cost themselves, and would have to repay these amounts in a timely and regular manner.

However, a number of features would be added to the repayment provisions for the trust account debt to minimize the discouragement from "debt overhang". Most importantly, repayments would be made contingent on the borrower's ultimate income, so that those incurring debt would never have to spend more than a small fixed percentage of their earnings to make a monthly payment on their account. Second, repayment periods would be set at 20 years for debt incurred for college or graduate school and ten years for training or retraining programs. Any debt remaining after these periods, during which time income-contingent repayments had been made, would be absorbed by the federal government. Third, borrowing limits would be established and could not be exceeded without prior debts having been extinguished -- again, like a line of credit account. And, finally, the ET Trust Accounts would be directly integrated into the income tax system, as IRAs and Keogh accounts are, in order to reduce debt collection and nonrepayment problems. These payments could be in the form of capped payroll deductions to ensure prompt repayment.

A More Effective Investment

Taken together, these three elements of the Education and Training Trust Account would go a long way toward streamlining America's financing of post-secondary education and training, resulting in a much more effective system for investing in our future workforce at little or no additional cost. In particular, because of the program's universality, all other federal education and training assistance programs for individuals could be combined into or linked with the ET Trust Account program, leading to substantial programmatic and administrative savings as well as greatly increasing the understandability and ease of using federal educational and training assistance. As an added benefit, the long-term nature and savings account-like features of the ET Trust Accounts should boost total private savings, which would raise the national savings rate and thus improve this other, equally critical side of the productivity equation.

Most importantly, however, the ET Trust Account would benefit the people most in need of help. It would give every student, regardless of income or background, a decent shot at a good higher education or advanced training, and at an economically rewarding life. Not only would this help to reverse the downward trend in workforce qualifications and capabilities, but it also would help strengthen the nation's social fabric by giving a much larger number of Americans a direct stake in a growing, productive economy. In the long run, that may do more than anything else to preserve America's place as the world's leading economic power, and as a land of hope and opportunity for all those who share the American dream.

Representative WILLIAMS. Thank you very much.

Our next witness is the chairman of the board of U S WEST, Jack MacAllister. I understand, Mr. MacAllister, that you have been with the Bell System for almost 35 years.

Mr. MACALLISTER. A little longer.

Representative WILLIAMS. Jack MacAllister was president of Northwestern Bell and 4 years ago was named the National Minority Advocate of the Year by the Small Business Administration.

We are pleased you are here, Mr. MacAllister. Please proceed.

STATEMENT OF JACK MacALLISTER, CHAIRMAN AND CEO, U S WEST

Mr. MACALLISTER. Thank you, Mr. Chairman.

Like most Americans, I am concerned about education. I care a great deal about it. My father was a teacher and I was raised in a school teaching home.

I have been very concerned about America's ability to compete as we compare the students and the young people coming into our business and how they are prepared versus how we are facing competition from international competitors.

I don't need to go through the problems of our schools. They are well documented, with the dropout rates and the problems of inadequate basic skills among high school and college graduates, a shortage of people trained in science and technology, and insufficient support for teachers.

Not long ago we asked Government, business, and community leaders what would help the economies most in the western part of the United States. We had a lot of interesting answers, but the one issue that every one of them mentioned was the desire to have a sound education system, a system that produced competitive young people.

At U S WEST we recently selected Boulder, CO, as the site for a new research center, primarily because of compatible research going on at Colorado University and nearby Colorado State University.

The important thing is that in our search we did what most businesses do. We looked for quality of education before deciding where we are going to locate facilities.

The quality of our schools also determines the quality of our work force. Our jobs increasingly require greater, more specialized abilities. The unskilled job, unfortunately, is going the way of the mimeograph machine. But far too many people leave school unprepared, untrained and unskilled.

We face the prospect of having both American workers without adequate skills and American industries without enough skilled workers.

Within the past 18 months our company has hired a dozen foreign nationals, mainly from the Far East, to undertake research in fields in which we were unable to find qualified Americans with the skills we needed. They are out there, but they are in such demand that we couldn't get hold of them. We spent many months and thousands of dollars trying to find them.

What's more, we often must teach basic skills to the employees we do take in. This year we are spending more than $50 million on employee training and education.

We have also committed $20 million over the next 5 years to support education at all levels. I have included details of that commitment in my prepared statement which I previously filed.

We look at this as an investment, not as a charity. It will strengthen our region by helping our schools do better than what they do now by expanding the reach of education, by building coalitions of parents, educators, and community leaders to improve our system.

It is my opinion that we cannot expect the school systems to do this alone; we cannot expect the Government to do it; we must involve the citizens, the communities, the businesses to get behind an education system and make it work. I think there is enough concern out there now to make this happen.

Many youngsters leave school unprepared because that's the way they went in. Unprepared for first grade and unable to make it to the second. Before that, perhaps unattended and undernourished at home. It doesn't leave much chance of succeeding in school, of moving into the work force, and ultimately contributing to society.

We are currently working with a program to bring unemployed homeless people back into the work force. Virtually all of them are high school dropouts.

The best investments, whether in business, Government, or education, are made up front. We suggest that investment in preschool education saves $6 in later social costs for every dollar expended and cuts by a third the likelihood of a child one day dropping out of school. The point needs emphasis: the most cost-effective programs focus on early childhood and preschool efforts.

One program that has served our nation well has been talked about here: Head Start. The Head Start program is funded for about $1.2 billion, but it reaches fewer than 1 in 5 of the 2.5 million children eligible for it, and it deserves more support.

Head Start and other preschool programs offer our best hope for providing needy youngsters the support to succeed beyond their school years.

I urge the Congress to fully fund this important program and to make it available to all who need it.

Also to look at early childhood programs and State funded preschool programs for the economically disadvantaged.

There is a special need to help children of the homeless. Health problems, abuse and neglect, hunger, inadequate school attendance, and often the lack of emotional stability demand our attention.

In this time of extreme pressures on the Federal budget we must find ways to leverage available Government dollars. My feeling is that there is enough interest in the businesses and the communities that matching funds from the Federal Government to support and encourage the investment on the part of private industry and individuals would be a very helpful process and I think it would work.

I have recently accepted the cochairmanship of the business partnership of the Education Commission of the States under the chairmanship of Governor Perpich of Minnesota. It is our intention to follow very vigorously these efforts to get communities involved, businesses involved, and I would encourage the Congress to look at ways to leverage their dollars to match private funding of education.

Thank you.

[The prepared statement of Mr. MacAllister follows:]

PREPARED STATEMENT OF JACK MacALLISTER

Mr. Chairman, Members of the Committee . . .

I'm Jack MacAllister, Chairman and C-E-O of U S WEST.

Like most Americans, I care a great deal about education. I care because education enriches our lives, makes our democracy work, and stimulates our economy. But, like many citizens, I'm concerned about education in America.

The problems of our schools are well documented: high dropout rates, particularly among minority students; inadequate basic skills among high school and college graduates; a shortage of people trained in sciences and technology; insufficient support for our teachers, and more.

Not long ago we asked government, business and community leaders what would most help the economies of their states. Response ranged from more diverse industries to expanded tourism and from greater emphasis on international trade to an improved quality of life. What all identified as primary, however, was a sound educational system.

At U S WEST, we selected Boulder, Colorado, as the site of our new research center, primarily because of compatible research under way at the University of Colorado and Colorado State University. We did what most businesses do: look to the quality of educational institutions when deciding where to locate new facilities.

The quality of our schools also determines the quality of our work force. Our jobs increasingly require greater, more specialized abilities. The unskilled job is going the way of the mimeograph machine. But far too many young people leave school unprepared, untrained, and unskilled.

We face the prospect of having both American workers without adequate skills and American industries without enough skilled workers. Within the past 18 months, my company has hired a dozen foreign nationals, mainly from the Far East, to undertake research in fields in which we were unable to find qualified Americans with the skills we needed. We spent many months and thousands of dollars unsuccessfully seeking qualified Americans.

What's more, we often must teach basic skills to employees. One estimate says American business now spends nearly as much on training and education as the nation spends on formal education from elementary school through college. U S WEST spends more than $50 million a year for employee training and education.

We've also committed $20 million over the next 5 years to support education at all levels. Details of that commitment are attached to my testimony, but I emphasize that this is an investment, not charity.

It will strengthen our region by helping schools do better what they now do well, by expanding the reach of education, by building coalitions of parents, educators and community leaders to improve our systems, and by recognizing and encouraging good teachers.

So government and business and communities are addressing many needs of our schools. But it's not enough.

Many youngsters leave school unprepared because that's the way they went in. Unprepared for first grade and unable to make it to the second. Before that, perhaps unattended and undernourished at home. It leaves little chance of succeeding in school, of moving into the work force, and, ultimately, of contributing to society.

The best investments--whether in business, government, or education--are made up front. In the telephone business we learned long ago that poor service--missed appointments, incorrect bills, and inadequate facilities--is expensive service. In education, too, trying to fix things costs more than getting them right in the first place.

Research suggests $1 invested in preschool education saves $6 in later social costs and cuts by a third the likelihood of a child one day dropping out of school. The point needs emphasis: the most cost-effective programs focus on early childhood and preschool efforts.

One program that has served our nation well is Head Start. For nearly 25 years Head Start has endured as the primary model of early childhood programs for at-risk children. The federal appropriation for this excellent program is $1.2 billion. But it reaches fewer than 1 in 5 of the 2-1/2 million children eligible for it. It deserves more.

Head Start and other preschool programs offer our best hope for providing needy youngsters the support to succeed during their school years and beyond.

I urge the Congress to fully fund this important program, to make it available to the four in five who would benefit but cannot now participate. I'm encouraged that President-Elect Bush also supports the expansion of Head Start.

I ask the Congress to encourage additional early childhood programs, such as state-funded preschool programs for the economically disadvantaged, health care for needy mothers and children, child care, and other support programs.

There is a special need to help children who are homeless. Health problems, abuse and neglect, hunger, inadequate school attendance, and, often, a lack of emotional stability all demand our attention and commitment.

At a time of extreme pressures on the federal budget, we must find ways to leverage available dollars. One way is by calling on America's business and community leaders to build and expand community coalitions to meet our educational needs.

I've recently accepted the co-chairmanship of the business partnership of the Education Commission of the States, under the chairmanship of Governor Perpich of Minnesota. It's an effort of governors, state legislators, business leaders, and education policy makers to improve our schools. Much more can be done.

Congress can encourage greater private sector involvement by targeting federal funds that challenge and match private funds and encourage private sector initiatives. Federal appropriations can be leveraged to strengthen our nation's education system.

The private sector can help the schools plan, manage, and improve productivity. We can work more closely with youth and other community organizations to improve educational opportunities for our young people.

We can make greater use of technology in education. At U S WEST, for example, we've installed distance-learning systems that allow students and teachers at different locations to see, hear, and talk with each other. That means more students can take advantage of special classes in, say, music, science, and foreign languages. It means schools can improve productivity by reaching more students in more places.

Congress can set an example, too, by recognizing and rewarding schools that work, helping communities use the best ideas from throughout the nation.

Let us direct our resources to those who establish _real_ support--education, training, counseling, child care--for those in need. Let us support teachers who effectively help others develop basic skills. Let us support and encourage local community efforts to help our schools and colleges achieve the excellence we all want from them. Let us help our young people fulfill their potential.

Surely, there is no more urgent investment needed in the future of our nation.

Thank you.

Representative **Williams**. Thank you, Mr. MacAllister.

Our next witness is Mr. James Murphy, executive vice president, New York State Bankers Association, and also chairman of the board of trustees, City University of New York, since 1980. That is the third largest system in the United States with 183,000 students, 18 colleges, a graduate center, law school, and medical school. Of equal importance is that Mr. Murphy's wife, Margaret, is a New York City schoolteacher.

We are pleased you are here, Mr. Murphy.

Representative **Scheuer**. Will the Chairman yield?

Representative **Williams**. Congressman Scheuer.

Representative **Scheuer**. I want to express my personal pleasure in having Jim Murphy here to give us his views. He is a distinguished citizen of New York City and he is a distinguished citizen of the Eighth Congressional District, where I come from.

Jim, you are welcome. We are delighted you are here.

STATEMENT OF JAMES P. MURPHY, EXECUTIVE VICE PRESIDENT, NEW YORK STATE BANKERS ASSOCIATION, AND CHAIRMAN, BOARD OF TRUSTEES, CITY UNIVERSITY OF NEW YORK

Mr. **Murphy**. I am happy to be here, Congressman Scheuer, Congressman Williams, and Congresswoman Lowey.

Representative **Lowey**. Thank you. I was going to say it is a particular pleasure being here to greet you.

Mr. **Murphy**. It has been kind of a heavy morning. I am reminded of a professor who recently gave a test to the class on what is the greatest problem facing America, ignorance or apathy. Most of the students filled two blue books, but this one fellow just wrote one sentence. He said:

> You asked me what's the greatest problem facing America. I don't know and I don't care.

Representative **Williams**. Mr. Murphy, that's the reason we invited an Irishman, to break up these panels a little bit. Thank you.

Mr. **Murphy**. The thrust of my prepared statement, which has been filed, is that I believe any process of review of what the problems are of getting people into college and how they might be addressed, has to look at it from the point of view of providing all of our youth with an opportunity to get into the education mainstream. This is particularly a problem for urban youth who are increasingly black and Hispanic and very often they are left out.

In order to deal with this problem, we are going to have to cut the dropout rate and expand opportunities not only for postsecondary education, but at the same time expand opportunities for disadvantaged high school graduates to seek opportunities in the work force. There may be some way to combine the two elements of postsecondary education and being in the work force.

This is not only a problem for the corporate community, the business leaders, and for Congress, but I believe there is a real challenge to raise the awareness of people throughout the country that improving education for all will improve the economy. This is our major task: to get the word out and to get people to appreciate the seriousness of this problem.

I will mention a few things that the City University is involved in. We are an open access university, but we are a quality institution. To start there is one thing, but to get your diploma you really have to prove yourself.

Getting back to the Truman Commission report, I hope I live long enough to see free tuition reinstated at City University. It went by the boards in the mid-1970's, in the fiscal crisis. But I do think that it is an appropriate long-term objective.

In order to create a feeder system for City University, we have established a number of collaborative programs with the public education system in New York City. We run six high schools that are directed at children who are likely to be dropouts. These are our "middle colleges" and they are located primarily in our community college system.

We have a number of cooperative education programs where most of the Fortune 500 participate with our community colleges in these endeavors.

Every summer we have a prefreshman summer basic skills program. Last summer we took 4,500 students who had just graduated from high school. They spent 8 weeks during the summer improving their math and reading skills. In other words, getting much of the remediation work behind them before their freshman year starts. This is an inexpensive program and it is tremendously cost effective, and it is one of the most innovative things that we have done in recent years.

We are in the process of a major restructuring of our teacher education and training programs. We train most of the teachers for the public schools of New York City. I don't believe we are doing an adequate job.

We must train teachers so that they can look at the human service needs of children and families as well as the education needs in the conduct of their activities as teachers.

We are undertaking a major program working with the Kennedy Foundation to strengthen the training of those who care for and work with the mentally retarded and the developmentally disabled in New York.

The recruiting and training of people to work in the whole range of human service areas, which was indicated earlier by Mr. Sugarman, is something that we feel very acutely in New York. So we have begun a program to deal with the issue of how do you attract people into the field of mental retardation, how do you give them credentials, how do you give them prestige, how do they get to feel that it is worthwhile doing?

These programs are working in large part because many corporations work with us. We are becoming increasingly involved in efforts between corporate New York and the school system to achieve a better public education system. I mention the Governor's Schools and Business Alliance, which is very, very important effort statewide.

Only yesterday Governor Cuomo noted at the City University Graduate Center, where he gave the first lecture at the Howard Samuels Center for State Government, that the work force in the year 2000 will be comprised 80 percent of women, blacks, Hispanics, and immigrants. Those are the new entrants that will be added to our work force at that point in time. So this means that we are going to have to be conscious of these demographics as we go forward.

Putting my banker's hat on for a minute, I would like to mention a program that the New York State Bankers Association has been involved in with nine high schools in Brooklyn and Queens, 100 churches, and 10 New York banks for the last 2½ years.

This is a program whereby an entry-level job in a bank is guaranteed to all high school graduates having the basic skills. We are trying to help reform the public education system in our city, which as has been noted earlier today, is in a crisis mode.

We have also nine private colleges who are providing 100 scholarships a year to these high schools. We see that what we have to do is to create a rising tide that will elevate all boats. Also, the City University remains an option for a low-tuition quality education.

The banks are providing, in addition to full-time jobs, part-time jobs of 20 hours a week with a full benefit package, including tuition reimbursement, for those that want to pursue a college program on a part-time basis.

This is working because we have grassroots involvement. The 100 churches that I referred to are the instrumentality for getting the word out in the community that public education is important to the welfare and the viability of the community over time.

The name of the program I described is Nehemiah II. The original Nehemiah is the housing program at East Brooklyn. Nehemiah is the prophet who rebuilt the Walls of Jerusalem. He took his shirt off and went to work with the residents of Jerusalem and accomplished that great biblical achievement.

Nehemiah II is a very, very important model: getting the community, getting the schools, and getting the corporate sector to work together to achieve major improvement in our public education system.

A number of these things are happening in different parts of the country. There has to be more of it. Our problem is dealing with a mere 300 to 400 students a year. We will expand the program to the South Bronx next year. But we are talking about literally hundreds of thousands of students that have to be helped across the Nation.

It is important that this hearing focus on this challenge: How can there be catalysts to encourage business, schools, and communities to work together to improve public education?

What can the Federal Government do about this? Well, the Federal Government can be a leader in education reform. It has already done it with a number of programs. But I will mention only two.

I was delighted to hear Congressman Williams state his strong commitment to the Pell grant program. That is very, very important to students attending City University. It should be expanded because it does provide an important resource in addition to what is available at the State level in the form of tuition assistance programs and our low tuition in public university systems. It is an important element in enabling the poorest youngsters to go to college.

The other thing I would suggest be revisited is an expansion of title I of the Elementary and Secondary Education Act, the enrichment programs.

From our own hands-on experience over 3 years working with high schools, plus our own involvement with City University in dealing with high schools, I feel we must have the resources to be able to provide more than just an adequate reading, writing, and mathematical skills capacities to our students. We have to give them every opportunity to develop those capacities to their fullest.

I have enjoyed the opportunity for being able to participate here. I think the work of this subcommittee is one of the most important presently under way in this city.

Thank you.

[The prepared statement of Mr. Murphy follows:]

PREPARED STATEMENT OF JAMES P. MURPHY

THE SUBJECT OF MY TESTIMONY TODAY IS THE MOST CRUCIAL AND THE MOST URGENT THAT I CAN CONCEIVE, AND I TRUST THAT THE MEMBERS OF THIS CONGRESSIONAL SUBCOMMITTEE FEEL THE SAME WAY.

THE SUBJECT IS HOW TO BRING ALL OUR YOUTH, INCLUDING AND ESPECIALLY THE DISADVANTAGED, INTO THE NEW AGE OF EDUCATION, AND THUS INTO FULL MEMBERSHIP AND PARTICIPATION IN OUR WORKING AND LIVING SOCIETY.

THIS SUBCOMMITEE IS INTERESTED, I KNOW, IN THE NECESSITY OF INVOLVING EVERY POSSIBLE SECTOR -- AND SURELY THE BUSINESS SECTOR, IN THE IMPROVEMENT OF EDUCATIONAL OPPORTUNITY AND EDUCATIONAL OPERATIONS, FOR THE BENEFIT OF OUR ECONOMY, AND BEYOND THAT, OF OUR ENTIRE SOCIETY.

MY PROFESSION IS THAT OF A LAWYER AND BANKER, AS HEAD OF THE NEW YORK STATE BANKERS ASSOCIATION. MY AVOCATION IS THE FIELD OF HIGHER EDUCATION, AS A LONG-TIME TRUSTEE AND BOARD CHAIRMAN OF THE CITY UNIVERSITY OF NEW YORK. BOTH OF THESE IDENTIFICATIONS MERGE INTO MY TESTIMONY TODAY, ON HOW ALL ELEMENTS OF OUR NATION CAN AND MUST BE MOBILIZED TO ENLARGE THE SIZE AND STRENGTHEN THE QUALITY OF THE AMERICAN WORKFORCE, AND THUS IMPROVE U.S. COMPETITIVENESS IN THE EMBATTLED WORLD ECONOMY.

WITH YOUR PERMISSION, I WOULD LIKE TO SHARE SOME STATISTICS WITH YOU THAT NECESSITATE THE USE OF THE WORD "MUST" IN THE PREVIOUS SENTENCE.

** ILLITERACY AMONG MINORITY STUDENTS IS AROUND 40%. YET HALF OF ALL NEW WORKERS HIRED BETWEEN NOW AND THE END OF THE CENTURY WILL BE MINORITIES, NEARLY THREE TIMES THE CURRENT FIGURE.

** THE DROPOUT RATES FOR HISPANICS, BLACKS AND WHITES, AGED 18-21, RESPECTIVELY ARE 29%, 18% AND 14%. THEY ARE 50% IN WASHINGTON AND 35% IN NEW YORK CITY.

** IT COSTS $4,000 A YEAR TO SEND A CHILD TO SCHOOL, AND $14,000 ANNUALLY TO KEEP A PRISONER IN A JAIL. THE DIFFERENCES IN COST (AND PAIN) THAT THOSE IN THE WORK FORCE AND THOSE IN JAIL BRING TO SOCIETY ARE NOT MEASURABLE, BUT IT IS SAFE TO SAY THEY ARE MORE THAN $10,000 PER DROPOUT.

** NOT ONLY MUST WE DEDICATE OURSELVES TO KEEPING OUR CHILDREN IN SCHOOL, AT LEAST THROUGH HIGH SCHOOL, WE MUST DIRECT NEW ENERGIES AT THE QUALITY OF THEIR EDUCATION. IN STANDARDIZED TESTS BETWEEN 1983, AND

1986, U.S. HIGH SCHOOL SENIORS CAME IN LAST AMONG STUDENTS FROM 13 COUNTRIES. THEY WERE 11TH IN CHEMISTRY AND 9TH IN PHYSICS. OTHER TESTS HAVE SHOWN OUR HIGH SCHOOL GRADUATES CAN NOT CORRECTLY PLACE THE TIME OF WORLD WAR I, IDENTIFY OUR COUNTRY'S MOST NOTED AUTHORS OR HANDLE EIGHT GRADE MATH PROBLEMS.

** DEMOGRAPHICS POINT TO A DEFINITE WORSENING OF THE PROBLEM. IN NEW YORK CITY, FOR EXAMPLE, RACIAL MINORITIES ACCOUNT FOR ROUGHLY HALF THE WORK FORCE -- NOW. BUT THEIR NUMBERS HAVE INCREASED BY 30% SINCE 1977, AGAINST A DECLINE OF 61,000 WHITE WORKERS IN THE SAME TIME PERIOD. THIS TREND IS EXPECTED TO CONTINUE.

** DEMOGRAPHERS ALSO NOTE THAT THE TEEN POPULATION WILL DECLINE BY 20% IN THE YEARS BETWEEN 1975 AND 1995, WHILE THE NEEDS FOR LITERATE AND COMPUTER-EXPERIENCED ENTRY LEVEL PERSONNEL WILL GROW. THE BANKING INDUSTRY ALONE WILL NEED 260,000 NEW WORKERS BY THE END OF THE CENTURY.

MORE SPECIFICALLY, MY TESTIMONY TODAY WILL DEAL WITH AN EDUCATIONAL VENTURE, WITH WHICH I AM PERSONALLY INVOLVED, FOR STIMULATING AND MOTIVATING DISADVANTAGED SCHOOL-AGE YOUTH TO GO THROUGH HIGH SCHOOL AND BEYOND, TO ACQUIRE THE NECESSARY SKILLS, AND TO BECOME PART OF THE VITAL FORCES OF THEIR COMMUNITIES. IT IS CALLED NEHEMIAH II AND IT INVOLVES WORK WITH NINE NEW YORK CITY HIGH SCHOOLS - BUSHWICK, EAST NEW YORK, ERASMUS, JEFFERSON, MAXWELL AND REDIRECTION IN BROOKLYN, AND LANE, JACKSON AND SPRINGFIELD GARDENS IN SOUTH QUEENS. WE HOPE TO EXPAND INTO THE SOUTH BRONX NEXT YEAR.

IN THIS VENTURE, THE BANKING COMMUNITY PLAYS THE CRITICAL ROLE OF PROVIDING MOTIVATION THROUGH THE PROVISION OF ENTRY-LEVEL JOBS. THE EDUCATIONAL COMMUNITY, SPECIFICALLY THE CITY UNIVERSITY OF NEW YORK, PROVIDES A MAJOR OPTION: A COLLEGE EDUCATION. ALSO INVOLVED IN THE PROCESS ARE NINE, NEW YORK CITY AREA PRIVATE COLLEGES WHICH ARE PROVIDING SCHOLARSHIP ASSISTANCE.

UNIQUELY, NEHEMIAH II IS WORKING BECAUSE IT HAS REAL GRASS ROOTS IN THE FORM OF EAST BROOKLYN CONGREGATIONS AND THE QUEENS CITIZENS ORGANIZATION. BOTH THESE ORGANIZATIONS ARE SUPPORTED BY SOME 40-60 PROTESTANTS, CATHOLIC AND JEWISH CONGREGATIONS COMMITTED TO IMPROVING, AMONG OTHER THINGS, THE PUBLIC EDUCATION SYSTEM IN THEIR BOROUGHS. THESE ORGANIZATIONS ARE IN CONTINUOUS CONTACT THROUGH THEIR VAST NETWORK OF TEAM LEADERS WITH EACH OF THE HIGH SCHOOLS, ALL OF THE PARENTS AND GUARDIANS, AND THE MEMBERS OF THE JUNIOR AND SENIOR CLASSES.

AT THE SAME TIME, THREE COMMUNITY COLLEGES - KINGSBOROUGH, BOROUGH OF MANHATTAN AND LAGUARDIA - ARE WORKING WITH HIGH SCHOOLS TO IMPROVE STUDENTS ENGLISH AND MATHEMATHICS SKILLS.

SIMILAR UNDERTAKINGS ARE SPRINGING UP IN MANY CITIES AND REGIONS OFOUR COUNTRY. THE PRIVATE SECTOR HAS GOTTEN THE SIGNAL--AND IS GIVING THE SIGNAL--THAT IT HAS A VERY DIRECT INTEREST IN WORKING WITH SCHOOLS, AND WITH THE PUBLIC, IN PROVIDING SUPPORT FOR EDUCATION AND THUS SECURING AN IMPROVING WORKFORCE.

INDEED, IT IS A FACT THAT TODAY, OF ALL THE WORTHY CAUSES THAT BUSINESS COULD CHOOSE TO SUPPORT, EDUCATION ACCOUNTS FOR MORE THAN FORTY PERCENT OF TOTAL CORPORATE CONTRIBUTIONS. EVERY INDICATOR SHOWS THAT CORPORATE SUPPORT OF EDUCATION IS STEADILY INCREASING IN SUCH MAJOR AREAS AS SUPPORT OF EARLY EDUCATION PROGRAMS, GIFTS OF EQUIPMENT AND SCIENTIFIC INSTRUMENTATION, THE EXPANDED ACCEPTANCE OF CORPORATE SOCIAL RESPONSIBILITY, AND THE CORPORATE WORLD'S EXPANDING CONCERNS ABOUT THE QUALITY OF EDUCATION.

MOREOVER, THE PRIVATE SECTOR IS INCREASINGLY AWARE OF THE VITAL IMPORTANCE OF IMPROVING NOT ONLY THE QUALITY OF EDUCATION, BUT THE HOLDING POWER OF EDUCATION. TO MEET THE NEEDS OF THE PRIVATE ECONOMY SECTOR, WE MUST EDUCATE MORE AND MORE OF OUR URBAN YOUTH, CUT THE DROP-OUT RATE, AND EXPAND OPPORTUNITIES AND INDUCEMENTS TO ENTER THE WORKFORCE IN COMMERCE, COMMUNICATIONS, TRANSPORTATION, FINANCE AND INDUSTRY, AS WELL AS IN THE ARTS, MEDICINE AND EVEN EDUCATION ITSELF.

THESE ELEMENTS OF OUR ECONOMY HAVE AN EXPANDING NEED FOR AN EFFECTIVE AND EFFICIENT AND WELL-EDUCATED WORK FORCE. NEW JOBS BY THE HUNDREDS OF THOUSANDS ARE OPENING UP AND DEMANDING TO BE FILLED. BUT THERE IS AN ACUTE SHORTAGE OF TRAINED PEOPLE TO FILL THESE JOBS AT THE ENTRY LEVEL. OUR CHIEF WORLD COMPETITORS--IN SOUTHEAST ASIA AND IN EUROPE--HAVE BEEN DOING MUCH BETTER AT THIS THAN WE HAVE. WE MUST CATCH UP. WE MUST OVERTAKE THEM. WE CANNOT--AND MUST NOT-- ACCEPT THE FACT THAT THIS COUNTRY'S FUNCTIONAL LITERACY RATE IS 80%, WHILE THAT OF JAPAN IS 95%.

I AM SURE THAT THE MEMBERS OF THIS SUBCOMMITTEE, FROM THE RECORD OF ITS PAST HEARINGS, ARE WELL AWARE OF THIS CHALLENGE. I DON'T NEED TO CONVINCE YOU. BUT I AM NOT SURE THAT THE COUNTRY AS A WHOLE IS SUFFICIENTLY AWARE THAT ALL SECTORS OF SOCIETY MUST BE COMMITTED WHOLE-HEARTEDLY--AND MOBILIZED--FOR THIS ENTERPRISE.

I BELIEVE THAT THE EDUCATIONAL SECTOR, FOR INSTANCE, CAN AND SHOULD DO MORE. THE CITY UNIVERSITY, MY INSTITUTION, IS ALREADY DOING A GREAT DEAL IN COLLABORATIVE EFFORTS WITH PUBLIC, ELEMENTARY AND SECONDARY SCHOOLS. THE COLLEGES OF THE CITY UNIVERSITY OPERATE OR OVERSEE THE OPERATION OF A HALF-DOZEN PILOT HIGH SCHOOLS. THEY ARE MAJOR SUCCESS STORIES. THERE SHOULD AND COULD BE MORE. WE ARE PLANNING TO DO A GREAT DEAL MORE TO HELP THESE AND OTHER SCHOOLS IMPROVE WHAT THEY ARE DOING, AND THE WAY THAT THEY ARE DOING IT.

IN NEW YORK, THE BOTTOM LINE IS CLEARLY A PRODUCTIVE RELATIONSHIP BETWEEN BUSINESS, EDUCATION AND THE COMMUNITY. MANY OF OUR COLLEGES EMPHASIZE COOPERATIVE EDUCATION, WHICH MEANS THAT STUDENTS GO TO WORK AS THEY GO TO CLASS, THAT THEY BUILD A RESUME ALONG WITH THEIR DEGREE. SUCH COOPERATIVE EDUCATION PROGRAMS COULD NOT--AND WOULD NOT--EXIST WITHOUT THE DIRECT SUPPORT OF MANY OF THE LARGEST CORPORATIONS IN THE WORLD.

HERE IS ANOTHER EXAMPLE. IN COOPERATION WITH PUBLIC AND PRIVATE HUMAN SERVICES AGENCIES, THE CITY UNIVERSITY IS WORKING TO IMPROVE THE TRAINING OF THOSE WHO CARE FOR, AND WORK WITH, PEOPLE WITH MENTAL RETARDATION AND DEVELOPMENTAL DISABILITIES. OUR JOINT EFFORTS WILL PROVIDE CARE WORKERS, CLINICIANS, AND SUPERVISORS WITH OPPORTUNITIES TO LEARN NEW SKILLS AND ENTER NEW CAREERS. THIS WILL INCREASE RETENTION AMONG THOSE WORKERS AND IMPROVE OVERALL SERVICES PROVIDED TO MENTALLY RETARDED AND DEVELOPMENTALLY DISABLED CITIZENS.

THE CITY UNIVERSITY, WHILE IT IS A QUALITY, RESEARCH ORIENTED UNIVERSITY, IS UNIQUE IN ITS ACCESSIBILITY AT THE UNDERGRADUATE LEVEL FOR EDUCATIONALLY DISADVANTAGED AND UNDERPREPARED STUDENTS. MOST OF THESE STUDENTS IDENTIFY WITH MINORITY ETHNIC GROUPS AND LANGUAGE GROUPS. MAJOR ASPECTS OF THE FUTURE OF OUR CITIES -- AND OF OUR COUNTRY-- DEPENDS UPON THE DEGREE OF SUCCESS IN PROVIDING EDUCATIONAL OPPORTUNITY AND SUPPORT FOR THESE FIRST-IN-THEIR-FAMILY COLLEGE STUDENTS.

WE HAVE TRIED HARDER, AND DONE MORE, WITH THIS CATEGORY OF STUDENTS, THAN ANY OTHER PUBLIC INSTITUTION OF HIGHER EDUCATION IN THE NATION.

BUT WE ARE NOT SATISFIED WITH WHAT WE HAVE DONE UP TO NOW. WE ARE RESOLVED TO DO MORE. WE MUST DO MORE.

ONLY WITHIN THE PAST YEAR, WE HAVE DONE THE FOLLOWING:

** WE CREATED A BOARD TASK FORCE ON STUDENT LIFE WHICH MADE RECOMMENDATIONS, WHICH WE ARE URGENTLY MOVING TO IMPLEMENT, TO STRENGTHEN THE ENTIRE RANGE OF STUDENT SUPPORT MECHANISMS TO HELP KEEP THESE STUDENTS IN SCHOOL. THESE SUPPORT SYSTEMS INCLUDE ACADEMIC AND PERSONAL COUNSELLING AND TUTORING; AN IMPROVED RANGE OF FINANCIAL ASSISTANCE AND FINANCIAL COUNSELLING; AND ALSO DAY CARE PROGRAMS.

** WE CREATED A TEACHER EDUCATION TASK FORCE WHICH RECOMMENDED STRENGTHENING THE ACADEMIC PREPARATION OF TEACHERS, WITH MORE EMPHASIS ON SUBJECT MATTER AND LESS ON PEDAGOGY. THE TASK FORCE RECOMMENDED A GREATLY INCREASED EFFORT TO RECRUIT HIGH-ACHIEVING MINORITY STUDENTS FOR THE TEACHING PROFESSION, AND TO MAKE THE TEACHING PROFESSION MORE PRESTIGIOUS. THESE RECOMMENDATIONS, TOO, ARE IN THE PROCESS OF TRANSLATION INTO URGENT ACTION PROGRAMS.

** THROUGH OUR COLLEGES, WE HAVE LAUNCHED A MAJOR PRE-FRESHMAN SUMMER SKILLS PROGRAM WHICH HAS ALREADY TESTED OUT SUCCESSFULLY IN OVERCOMING SEVERE EDUCATIONAL DEFICIENCIES.

TO SUM UP, WE ARE TRYING TO THINK IN NEW TERMS, AND TO DO NEW THINGS, TO MEET THE NEW NEEDS. ONE OF THE MOST CRITICAL OF THESE UNDERTAKINGS IS TO MOTIVATE HIGH SCHOOL GRADUATES TO ENROLL IN COLLEGE, ON EITHER A PART-TIME OR FULL-TIME BASIS, AND TO GRADUATE, THUS BECOMING PART OF THE CONSTRUCTIVE HUMAN RESOURCES OF OUR CITY, STATE AND NATION.

RETURNING TO NEHEMIAH II, THIS PROGRAM HOLDS OUT TO THE STUDENTS THE PROMISE OF A SURE JOB IN A BANK UPON GRADUATION, AFTER THE PASSAGE OF QUALIFYING TESTS IN BASIC SKILLS. AS AN OPTION, THERE ARE COLLEGE SCHOLARSHIPS. AND LET ME NOTE THAT THE PLEDGE INVOLVES MORE THAN A JOB; IT'S REALLY A CAREER OPPORTUNITY. SEVERAL OF OUR NEHEMIAH HIRES HAVE RECEIVED ONE OR MORE PROMOTIONS - AND ALL WILL BE ABLE TO GO AS FAR AS THEIR SKILLS AND DEDICATION ALLOW THEM TO GO.

THE BANKS PLEDGE THE JOBS IN ADVANCE. IN THE FIRST YEAR OF THIS PILOT PROGRAM, PARTICIPATING BANKS HIRED 120 PEOPLE. IN THE SECOND YEAR, 220 HIGH SCHOOL GRADUATES FROM SOME OF THE CITY'S WORST SCHOOLS IMPROVED THEIR SKILLS AND WERE PLACED IN BANKING JOBS. OVER 50 OTHERS WERE AWARDED PRIVATE COLLEGE SCHOLARSHIPS.

MOREOVER, IN NEHEMIAH II, THE UNDERLYING THEME IS NOT ONE OF GRACE OR CHARITY, BUT RATHER ONE OF HONEST TRADEOFF. THE YOUNG PEOPLE ARE OFFERED THE CHANCE FOR A CAREER JOB OR A COLLEGE EDUCATION. THEY MUST MAKE GOOD, THROUGH THEIR EFFORTS ALONG EITHER ROAD. THIS MAKES SENSE TO THE BANKS WE NEED ENTRY LEVEL PERSONNEL AND TO THE COLLEGES AND UNIVERSITIES INVOLVED, AND IT MAKES SENSE TO THE YOUNG STUDENTS. IT RINGS TRUE, AND IT WORKS, AND IT BRINGS OUT THE BEST FROM ALL THE PARTIES CONCERNED. MOST IMPORTANTLY, WE ARE TRYING TO SUBSTANIALLY IMPROVE THE PERFORMANCE OF THE SCHOOLS IN EVERY FACET.

OF COURSE, THE NEHEMIAH PROGRAM, AND ALL SIMILAR PROGRAMS TO WHICH I HAVE REFERRED, ARE PILOT OR DEMONSTRATION PROGRAMS. PILOT PROGRAMS SUCH AS THESE ARE NOT THE SOLUTION. THEY ONLY POINT THE WAY. THESE PROGRAMS DEAL WITH HUNDREDS OF STUDENTS. THE PROBLEM CONSISTS OF HUNDREDS OF THOUSANDS OF YOUTHS WHO NEED TO BE MOTIVATED AND INSPIRED, AND THEN EDUCATED.

COSTS ARE INVOLVED. SIGNIFICANT COSTS. BUT THERE ARE MUCH BIGGER COSTS FOR NOT ATTACKING THIS PROBLEM. AS A BANKER, I AM VERY SENSITIVE TO THE COST FACTOR. BUT, AS A UNIVERSITY TRUSTEE AND PARENT, I AM CONVINCED THAT THERE ARE SOME THINGS WHICH WE CANNOT AFFORD NOT TO DO. WE ALL KNOW THAT AN INVESTMENT IN LEARNING IS AN INVESTMENT IN OUR FUTURE, IN THE WELL BEING OF OUR CITIZENS AND OUR FAMILIES, IN OUR NATIONAL GROWTH AND STABILITY, IN OUR INTERNATIONAL STATURE AND AUTHORITY.

THIS IS TOO BIG A PROBLEM FOR PRIVATE ENTERPRISE ALONE, OR FOR THE LOCAL AND STATE GOVERNMENTS ALONE. THIS IS A PROBLEM FOR US ALL. THE CHALLENGE WILL BE TO ENCOURAGE ALL GROUPS IN OUR SOCIETY TO BROADEN THEIR SUPPORT FOR OUR EDUCATIONAL SYSTEM AND MAKE THAT INVESTMENT. BUT THE LEADERSHIP MUST COME FROM THE FEDERAL GOVERNMENT. THE FEDERAL GOVERNMENT CAN DEFINE THE ROLES WHICH OTHERS MUST AND SHOULD PLAY. AND SOME FUNDING INDUCEMENTS WILL HELP.

MONEY ALONE WON'T SOLVE THE PROBLEMS AND MEET THE NEED. BUT SOME FEDERAL MONEY IS ESSENTIAL TO HELP ACHIEVE THE PURPOSES I HAVE TRIED TO DEFINE AND DESCRIBE IN MY TESTIMONY TODAY.

ON BEHALF OF THE CITY UNIVERSITY, I WOULD CERTAINLY ENDORSE SUSTANTIALLY INCREASED FUNDING FOR CHAPTER ONE OF THE ELEMENTARY AND SECONDARY EDUCATION ACT WHICH FUNDS ENRICHMENT PROGRAMS FOR DISADVANTAGED STUDENTS.

ALSO, TO ACHIEVE THE STATED PURPOSES, I URGE MORE FUNDING FOR THE PELL GRANT PROGRAM. A MAJORITY OF CITY UNIVERSITY STUDENTS ARE PELL GRANT RECIPIENTS. IN TERMS OF FAMILY INCOME, MOST OF OUR STUDENTS ARE THE POOREST OF THE POOR. OUR GRADUATES ARE TRULY ENRICHED BY THEIR EDUCATION, AND THE NATION IS MUCH THE RICHER FOR IT. PELL GRANTS ARE A CAPITAL INVESTMENT, ENLARGING THE NATIONS PRODUCTIVE CAPACITY, AND ITS GROSS NATIONAL PRODUCT.

IT WAS ALEXIS DE TOCQUEVILLE IN 1840 WHO FIRST DESCRIBED THE UNITED STATES AS TWO NATIONS, THE LAND OF THE RICH AND THE LAND OF THE POOR. NEVER HAS THAT DESCRIPTION BEEN MORE APPROPRIATE THAN IT IS TODAY. TODAY, WE ARE A LAND OF THE TALENTED AND THE ACCOMPLISHED AND, AT THE SAME TIME, A LAND OF THE UTTERLY UNCULTURED AND UNEDUCATED. WE HAVE SOME OF THE BEST SCHOOLS IN THE WORLD. WE HAVE SOME OF THE WORST.

IN BEGINNING THIS TESTIMONY, I SAID THAT WE MUST BRING OUR DISADVANTAGED YOUTH--AND OUR ENTIRE SOCIETY--INTO THE AGE OF EDUCATION. IN THE RECENT NATIONAL ELECTION CAMPAIGN, BOTH CANDIDATES FOR PRESIDENT SPOKE IN ROUGHLY SIMILAR TERMS ABOUT THE URGENT NECESSITY OF TAKING NEW FORWARD STRIDES IN THE FIELD OF EDUCATION. THE PRESIDENT-ELECT SPOKE OF HIS INTENTION OF BEING THE EDUCATION PRESIDENT. ALL OF US MUST SUPPORT HIM IN THIS ASPIRATION, HOPING THAT IT CAN BE REALIZED IN PRACTICE AS WELL AS IN PURPOSE.

IF THIS IS REALLY TO BE THE AGE OF EDUCATION, IT MUST EMBRACE ALL OF OUR YOUNG AND, INDEED, EVERY PART OF OUR POPULATION. THE FINANCIAL AND BUSINESS COMMUNITY PROVIDE THE FUEL AND ENGINE OF OUR NATIONAL ECONOMY. BUT BUSINESS CANNOT PROSPER WITHOUT A WELL-EDUCATED WORKFORCE. SUCH A WORKFORCE IS THE FIRST LINE AND RESERVE FORCE OF OUR ECONOMIC POWER-- AND OUR CAPACITY-- TO COMPETE WITH OTHER NATIONS.

WE HAVE BEEN FALLING BEHIND. WITH THE KIND OF EFFORT I HAVE SUGGESTED--INCLUDING THE FEDERAL ACTIONS WHICH NEED TO BE TAKEN-- WE CAN HALT THIS DECLINE AND BEGIN TO SURGE FORWARD.

Representative WILLIAMS. Thank you, Mr. Murphy.

Our final witness on this panel is Mr. William Woodside, chairman of the board of Sky Chefs, Inc., in New York. Mr. Woodside is chairman of the Institute for Educational Leadership and cochairman of the School and Business Alliance for New York City, vice chairman of the board of trustees of the Committee for Economic Development, a member of the Education Advisory Council of the Carnegie Corp., vice chairman of the National Forum on the Future of Children and Their Families, and a member of the Business Higher Education Forum.

Mr. Woodside, please proceed.

STATEMENT OF WILLIAM S. WOODSIDE, CHAIRMAN, SKY CHEFS, INC.; PRESIDENT, PRIMERICA FOUNDATION; AND CHAIRMAN, BOARD OF DIRECTORS, INSTITUTE FOR EDUCATIONAL LEADERSHIP

Mr. WOODSIDE. Thank you, Congressman Williams. Thank you for inviting me, Chairman Scheuer.

It is clear that you run these hearings exactly the way the public schools run theirs. I am a "W," and therefore I am the last to be called on. I can see the same has happened to you many times, Congressman Williams.

I think this morning that is an advantage because it puts me in the delightful position of being able to give you footnotes on my summary comments. So it should be very brief.

The two words "Head Start" which has been discussed over and over again this morning was a terrible selection of a name and it has handicapped this program from the day it was started. It should have been called "Equal Start" because that was its objective—to provide an equal start for disadvantaged kids.

The middle class has never liked Head Start because they feel somebody else is getting a headstart on them. That is one of the reasons I feel that it has had less support than it should have had.

At this point we have lots of data around this. We know that as far as the kids themselves are concerned, we get better attendance, we get better grades; when they graduate they are more likely to find jobs; they form more stable families than the rest of the kids; they are much less on welfare, much less trouble with the law.

Now we are in the short term-long term. This is an economically sustainable investment program if you run it over a reasonable period of time. The payoff is substantially greater than Head Start costs. But unfortunately neither the business community nor the political community nor the Nation at large seems to be in a mood to really look at payoff time.

Let me talk briefly about a couple of others that I think are certainly equally as important.

This prenatal and postnatal care we have walked by rather quickly a couple of times this morning. I think some people consider Head Start to be the most successful social program of the last quarter of a century. I am not so certain that WIC doesn't fit in that category almost exactly.

We do know that presently if you live in an urban, disadvantaged community the chances of your survival at birth are less than they are in Costa Rica. We know that as a nation as a whole we are 17th on the world list in infant mortality. We do know that most learning disabilities are a result of low-birth weight. The closest correlation we can find to ability to learn later on has to do with these low-birth weight babies. The lowest payoff on this is 3 to 1, and it is pretty short term. The costs run on forever, incidentally, because there are heavy medical costs that are a result of some kind of deformation at birth.

We haven't talked much about immunization, but I think that is also a vital program, particularly for disadvantaged kids. One of the problems with the service that they get by going to emergency rooms is they don't get anything that is preventive in any real way.

We have talked a lot about "I have a dream" this morning. This is the Eugene Lang program. It has had many offshoots. I think we are looking at it the wrong way, though, or at least the comments this morning have sort of missed the point. It is not the incentive; it is the mentoring component of the "I have a dream" program that makes it work.

Let's take a typical class, Felix Rohatyn's class. There are 40 kids in that class. They have three mentors, Felix and his wife and a full-time social worker-psychologist.

In the year that this program has been running there has been one murder in one of the families of the kids and there have been three jail terms in three other families. It requires a lot of hard, close work in a disadvantaged community to get kids through the system. They need all the support network they can get because they don't get much at home. And he has been remarkably successful in doing that, as have many others.

But it is not the carrot at the end, the college education. It is getting them through the system, hand leading them, going down and getting them out of the clink at night. We are really talking in loco parentis that really makes this program work.

When you contrast it with a New York City public high school where you have one mentor for 1,000 kids, you begin to get the idea what the difference can really be.

Let's switch from preschool and some of these other things to what happens after they get out of high school.

We focused a lot on college, we focused a lot on scholarships, we focused a lot on grants and loans, and I think that ought to be encouraged. We have more kids going with a much greater choice than they have ever had in the past about where they go.

But for my money we are putting too much focus on the college bound and not enough on the 20 million out there who did not attend and who are not going to attend in the future.

W.T. Grant has just produced a major study on this, entitled "The Forgotten Half." It's a very serious problem. What does this forgotten half constitute? It ranges from construction workers, bus drivers, TV and auto repair, production line workers, service workers at hospitals, at offices, a whole wide range of things. That's the good end of that.

The bad end are the kids that never make it at all. They are in a limbo of unemployment, part-time jobs, ingrained poverty. And it's deadly.

We are unique in the Western World for our lack of support for the noncollege bound. If you look at the numbers today, they are just unbelievable. The average college student directly or indirectly receives $5,000 a year for every year he is in college. These are grants to the universities; they are loans to him. It's lumping in everything that impacts his college education. If you don't go to college, the max you can get for 3 months is $2,300. How's that for an equation? If you go to college, you get $20,000; if you don't, you get $2,300.

We have defined success in terms of going to college. We have defined failure as not going to college. We don't do anything for those who don't go. And it's time for us to begin to change that. I think noncollege youth are short changed beyond belief. I think the whole system rewards in the wrong way, and we can't afford such a monumental waste of human resources. There is no way we are going to reach our productivity goals, our competitive goals, or anything else if we just ignore this huge number of people.

How do you go about it? There are a lot of suggestions about how you handle this non-college-bound group. You can talk about a lifetime educational credit; you can talk about individual training accounts that are sort of like an early IRA, if you will, that focus on education; you can talk about national demonstration projects administered by the State. There are lots of things that would begin to really focus on this group.

If you look at it, the noncollege group today, the 20- to 24-year-olds, earns substantially less than that same cohort did 10 years ago. As a matter of fact, 56 percent can't keep a family of three above the poverty line. It's sort of once behind always behind.

This is a group that is currently being called the working poor. You are going to hear lots more about it. As vice chairman of the Future of Children and Their Families, which is a National Academy of Sciences, Institute of Medicine, and a Carnegie Corp. project, Congress is going to be hearing over and over again about what we can do about the working poor.

Thank you very much for the opportunity.

[The prepared statement of Mr. Woodside follows:]

PREPARED STATEMENT OF WILLIAM S. WOODSIDE

Mr. Chairman, I am William S. Woodside. I am Chairman of Sky Chefs, Inc. Before that, I served six years as chairman and CEO of the Primerica Corporation, formerly known as the American Can Company.

I am active in several organizations in which education is the primary focus. I co-chair the New York City School and Business Alliance. I chair the Institute for Educational Leadership, which is located in Washington, D.C. I am vice chair of the Committee for Economic Development, an organization composed of business and educational leaders that has been extensively involved in educational matters. I am president of the Primerica Foundation, which has made public education its major priority.

Mr. Chairman, I want to thank you for inviting me to testify. The two issues you have asked me to address this morning -- the need for more preschool programs, and the need to provide full access to post-secondary education -- are of long-standing concern to me.

At first glance, it seems that these two topics exclude precisely those years we should be talking about: the years between kindergarten and high school graduation, the years that form the core of the educational experience.

It is not my intention, just as I am sure it is not the intention of this committee, to detract from those years. But I do believe that we need to expand our view of the educational process, expand the boundaries as it were.

Let me begin with preschool.

Almost 25 years ago, when the Johnson Administration developed its War on Poverty, one component of that effort was Head Start, a program to provide preschool education for disadvantaged children. The theory behind the program was straightforward enough. Since disadvantaged children frequently had difficulty in school, a preschool program would put them in a better position to learn and grow.

Head Start succeeded beyond anyone's expectation. For more than a dozen years, it has been recognized as one of the most successful social programs ever developed in this country. Some view it as the most successful social program of the last quarter century.

This isn't an intuitive or subjective opinion. This is a judgement backed up by a wealth of data.

That data tells us that children who participate in Head Start do better in school than children who do not. They attend school more frequently, and their grades are higher.

The data also tells us that as these children grow into adults, they are more likely to find jobs, more likely to form stable families, less likely to go on welfare, and less likely to have trouble with the law.

With the public, the Congress and the Administration clamoring for social programs that "work", you would think that, given this record of success, we would fund Head Start to the hilt; or failing that, find some way of ensuring that all eligible children had the opportunity to participate in something like Head Start.

That is not the direction in which we are moving, however.

At the present time, some 2.4 million children are eligible for Head Start, but only 456,000 are enrolled. In other words, four of every five children who could benefit from Head Start are denied the opportunity to participate.

There is no question in my mind, and in the minds of many others, that this country needs to expand its publicly and privately supported preschool programs so that every child who can benefit from a preschool program has access to one.

But at this stage in our social history, when we are facing a poverty that is intractable and difficult to escape, we cannot focus only on preschool programs. We need to move beyond preschool and look at the broader economic and social environment in which so many millions of disadvantaged children are being raised.

We need, for example, to give serious consideration to the recommendations of such organizations as the Committee for Economic Development.

In a report entitled, "Children in Need: Investment Strategies for the Educationally Disadvantaged", the CED recommended that the nation give "the highest priority" to a broad range of early and sustained childhood programs designed to meet the educational, health and social needs of disadvantaged children.

These recommendations included an expansion of preschool programs, but they also included pre- and post-natal care for at-risk mothers, expanded programs of family health care, nutritional guidance, quality day care for working parents, an expansion of the Chapter I program, and special programs to help parents raise their children.

In addition, the CED recommended ongoing support systems within the schools themselves that included health and nutritional services, psychological and career counselling, and a variety of programs designed to keep young people in school.

That's not a complete program. But it was the CED's hope that, when combined with major educational initiatives, the program could help achieve two goals. One would be to provide support, health and sustenance for children who have more than their share of obstacles to overcome in order to succeed in this society. The other would be to make today's disadvantaged youth part of tomorrow's economic growth.

"This nation", the CED said in its most widely quoted statement, "cannot continue to compete and prosper in the global arena when more than one-fifth of our children live in poverty and a third grow up in ignorance. And if the nation cannot compete, it cannot lead. If we continue to squander the talents of millions of our children, America will become a nation of limited human potential."

There is not a radical proposal in the entire CED report. In fact, they are relatively modest. But if all of them were implemented, we would finally have the national commitment to improve the lives of children that we have talked about for years -- but which we never have actually undertaken.

Now for the second topic on the agenda: full access to post-secondary education.

Here I would like to move a little off center.

During the last 10 or 12 years, there has been a steady increase in the desire of young people to attend college and a steady increase in the numbers actually attending college.

Those are welcome developments. The fact that our colleges have a wider range of students from which to choose is one indication of our success. So is the increasing academic competition among college students.

That is as it should be. We should be encouraging all those who want to attend college to do so. We should reach out to those who have the ability but not the information or encouragement they need. We should be developing financing mechanisms that make college possible for bright young people of modest or limited means.

But I wonder if we are not focusing too much attention on the college-bound. I wonder if our preoccupation with those attending college, and those who want to attend college, causes us to lose sight of young people who are not likely to attend college.

There are 20 million young people who fall into this category, and, in the words of a national commission on Youth and the American Future, they are "the Forgotten Half."

Who are these young people? What do we know about them? What do they do? What happens to them?

The William T. Grant Foundation commission that spent a year studying non-college youth had this to say:

"They are the young people who build our homes, drive our buses, repair our automobiles, fix our televisions, maintain and serve our offices, schools and hospitals, and keep the production lines of our mills and factories moving."

"To a great extent they determine how well the American family, economy and democracy function. They are also the thousands of young men and women who aspire to work productively but never quite 'make it' to that kind of employment. For these members of the Forgotten Half, their lives as adults start in the economic limbo of unemployment, part-time jobs and poverty wages. Many of them never break free."

The problem, we are told, is that, as a nation, we prepare our college-bound youth for the future but assume our non-college bound youth will make it on their own.

But that's not how it works out.

The data the Grant Commission collected showed that young people between the ages of 20 and 24 who do not attend college earn less today than their counterparts earned ten years ago. It also shows 56 percent not even earning enough to keep a family of three above the poverty line. And when incomes decline, the odds start increasing that families will begin to break up, single parent households will be the norm, and children will start having problems at school.

In short, many young people who do not attend college find themselves swimming against an economic tide they cannot control. They find jobs that do not pay them enough and that do not allow them to support their families no matter how hard they work. Nor is their situation likely to improve. "Once behind, they stand to stay behind", the Commission said.

Yes, they are employed, but the conditions of their employment and the circumstances of their lives are growing proof that employment itself is no guarantee of widespread economic health or individual economic opportunity.

There may be many reasons why non-college bound young people find themselves in this position. One that is frequently overlooked is the startling difference between what we do for the college student and what we do for the non-college young person.

Each student in an institution of higher learning, for instance, can expect to receive a subsidy of $5,000 per academic year through a combination of public and private grants, loans and subsidies to individuals or institutions.

Meanwhile, among those who do not attend college, only five percent of those eligible for federally-supported job training actually receive this support. When they do, it lasts for only four months and totals only $1,800 to $2,300 per student.

In other words, the college student receives $20,000 worth of support; the non-college student $2,300.

You can argue with some of the data, but I don't think anyone can argue with the conclusion: non-college bound young people are being shortchanged by our economic system and by our political priorities.

We say we have a system of opportunity based on equity, but in point of fact we have a system which rewards those who go to college and neglects those who do not. College is equated with success. Not going to college is equated with failure.

In an era of global competitiveness in which our goal is to develop a healthy and productive economy, not just one in which everyone has a job, we cannot afford such a monumental waste of resources.

I am not arguing for a reduction in the support we currently offer college students. I hope we reach out to more people, encourage them to go to college, and make it possible for them to go to college.

But in conjunction with that, we need to develop some post-high school educational opportunities for those who do not want to attend college but still want to pursue their education.

Economist Lester Thurow has proposed a lifetime educational credit that each person could use as he or she saw fit. That is one idea. Others include individual training accounts patterned after individual retirement accounts, or a national demonstration program, administered at the state level, designed to increase access to post-high school education.

That is just a start. More ideas will certainly be forthcoming if we turn more attention to the young person who chooses not to attend college.

Mr. Chairman, nobody disputes the value of a college education. But a college education is not for everybody, and not everybody wants a college education.

Trying to put all our young people into one mold, and then judging them in terms of whether they fit this mold that someone else chose for them, is a serious error. Young people learn in different ways, at different paces. Let's try and develop a system of post-high school education that respects and builds on those differences.

If we want the largest number to succeed in life, then we have to provide our young people with more than a single pathway to success.

Representative **Williams**. My thanks to you, Mr. Woodside, and to each of our panelists. We very much appreciate the time you have taken to prepare your testimony and to come to Washington and share it with the Congress through this subcommittee.

Let me ask the members who are here to open their questions to any or all members of the panel.

Congressman Scheuer, we will begin with you.

Representative **Scheuer**. Thank you.

I have one question for the whole panel. I am going to precede that with a question to Mr. Woodside.

The question for the panel that you can be thinking about is how do we pay for the enhanced access to preschool education and postsecondary education that all of us seem to want. You are all hardheaded businessmen or you wouldn't be here today. You are all aware of the budget deficit and the fact that we know now that we can't do everything. We can probably do anything, but we can't do everything.

How do we set priorities of what is important in this country?

What is the role of the private sector? What should business be doing to enhance funding for preschool and therefore access to preschool? What should business be doing to improve the quality of education in elementary and secondary grades, to improve the quality of vocational education? What should business be doing to enhance access to postsecondary education?

We have seen what one brilliant businessman can do, the Gene Lang phenomenon. We know that that turns kids on. Should that handholding process that Mr. Woodside described be left to the charitable and eleemosynary sector of our society, to the charitable instincts of a few enlightened business people? Or can we institutionalize that? And if we can institutionalize it, can we get business behind the Gene Lang phenomenon in a major way?

Mr. Woodside indicated that the problem was not so much motivating kids to go to college but motivating them to get through elementary and secondary school, and he emphasized, quite properly, the important role that the handholding and the counseling and the caring plays.

Are corporations capable of doing that?

I would like Mr. Woodside, before the rest of you answer this question, to tell us what the corporate role is in assisting kids in getting through school and perhaps on to college. Which is more important, the incentive to go to school or the handholding to get through the elementary and secondary school system?

May not the handholding itself provide the incentive and the self-confidence in the kid? If the kid sees that he is getting some help, society cares about him, they are helping him make it through high school, might that not itself be the best incentive you could possibly create to motivate that kid to go on to some kind of postsecondary experience?

Mr. **Woodside**. If there is one thing these kids lack, it's tender loving care. That's for sure.

I don't think it's an either or sort of answer that I can give you, because I think all parts of this are very important.

Let me use the School and Business Alliance in New York City. This is an outgrowth of a program the Governor started a few years ago. It is sort of outside the official education system in the State. It is separately funded by the legislature and it basically provides seed money for various cities in the State. New York gets about $700,000, which, given the size of the New York City budget, doesn't do very much for you.

But it also, certainly in the case of New York City, involves the business community up to their ears, and it involves all the major foundations and funding sources in the city. The program this first year will run something over $3 million. So the State's $600,000 or $700,000 is not going to be a major component. It is important, but it is only 25 percent.

There are three programs that we try to run simultaneously. We have what is called New York Working which is a way in which to encourage kids to finish school with the promise not of a guaranteed job, but if they meet the standards we will have a job available for them. We have an employment office in each of the six schools that we are now doing this in. We are beginning to feed people into the work force. We have major partners through the New York City Partnership, involving all the major businesses who are lining up jobs for these kids. That's stage I. It's working quite well.

Stage II is something we call New York Learning which is an attempt to do something that the Lang program does not do, and that is how do we stimulate and encourage change in the system itself, in the structure of education, and how do you go about educating kids.

What makes New York so frustrating is you have a system that is a disaster, and yet 100 of the 300 Westinghouse semifinalists came out of that system. It can't all be bad, but how do you replicate that? How do you break up this logjam of teachers unions and supervisors and community school boards and all the rest that makes it so difficult to operate?

So we are working very closely through the chancellor's office and trying to support a number of major educational initiatives which will start in the fall of 1989.

But because of our feeling that all of this isn't going to work unless we can provide some kind of support network for the kids, we have something called New York Mentoring which is a way of training mentors and training groups that want to mentor these children. That has received enormously positive response in the city. I don't look at this as a business sort of thing. It's community volunteers taking on this problem.

It is ironic that people are willing to spend hundreds of hours doing this but they are not willing to think about spending more money to do this.

So there are a lot of things that have to be done, it seems to me, if this is to work.

Representative **Scheuer**. Lou Harris testified before this subcommittee when we had the first 9 days of hearings. When he asked the question, would you be willing to accept an additional 1 percent tax for education if you knew it wasn't going to go down the same rat hole, if you knew it was going to produce something different, something new, something fresh, it was going to improve the process, improve the learning, about 70 percent of them said yes, they would.

Mr. WOODSIDE. That's great, but that's a chicken and an egg problem. Do you know how long it will take in New York City, if we can pull it off? And God help us if we can't. It will take 10 years minimum, probably 20, to make a dramatic change in that system.

Representative SCHEUER. I would settle for the 10 years right now. We have to do it. Otherwise our society is going to fall apart. We can't afford not to do it.

Mr. WOODSIDE. Absolutely. We can't afford to even think that it isn't going to work.

Representative SCHEUER. I asked one general question to the panel.

Mr. MURPHY. I think the roles have to be very clear. I don't think corporations ought to be teaching basic skills. The corporation and the local community ought to insist that the schools perform. The way they are going to perform is by community involvement, communities insisting that they perform.

Corporations can do some things. They can talk about the world of work; they can point the way, show that there is a payoff, that it makes sense, that there are jobs that are not dead-end jobs. In the banking industry, traditionally, there is a tremendous amount of upward mobility; in the Bell System there is a tremendous amount of upward mobility. There are opportunities to continue your education throughout a lifetime, to have most of the cost of that covered by the corporation. But I think the roles have to be very, very clear.

What I have not heard today is an awful lot of discussion about getting communities involved. The users are the parents and the kids. However that family may be fractured, however it may be dysfunctional, part of the process of getting a dysfunctional family to be a functional family is to say there is a payoff for you if you get involved in this process of making our education system work.

Representative SCHEUER. Jim Murphy, do you want to deprive us of our last fair chance at making these kids literate, to teach them reading, writing, and counting skills that somehow they don't get in the regular school setting?

I would also like to hear Bill Woodside elaborate on this.

We have seen from experience that for some reason or other, without pointing the finger of guilt at anybody, some kids are totally turned off by the school experience.

Mr. MURPHY. I'm talking about an objective. The City University teaches kids how to read and write, and that should have been done in grammar school. But we have an objective of ultimately working our way out of remediation and performing across the board in a more traditional higher education function. The corporations are doing a lot of this now. I think our goal ought to be very clear. This is not our responsibility as the private sector. This is the school system's responsibility.

Representative SCHEUER. Mr. Murphy, you are absolutely right. It is the school system's business. It should be the school system's business; it has to be the school system's business, but right now it simply is not; it is not happening in all too many cases.

If a kid is turned off by the whole gestalt, the whole environment of school, and he gets a job, maybe an entry level job, but there is a release time program and somebody there is telling him there is a class with his fellow employees, they're all in uniform, in the plant, and they are being taught how to read, write, and count in a way that is relevant to him, he can see that it is going to help his career, are you going to tell us that corporations can't be our last failsafe hope for giving these kids literacy skills if for some reason that kid is willing to learn and involve himself in a corporate setting, in a plant, in a business setting, where he wasn't apparently turned on by the school?

If he was turned off at school, are we going to say that this last failsafe device that we have developed to teach kids on the job, if they are willing, that we have to abandon that?

Mr. **Murphy**. As an interim measure, no. We will do what we have to do. If we don't understand what it is we ultimately want them to attain, I think we are going to find schools doing a lot of confusing things and corporations really unnecessarily expending resources that are very precious. What I am concerned about is the corporation, ultimately out of frustration, being turned off. Right now corporate America wants to get involved in the business of making education work.

I think there ought to be a clear understanding of what the goals of the various aspects of this process are. Otherwise I think we will have a compounded frustration 5 or 10 years from now and there will be another crisis to deal with. In the meantime a lot of good jobs will be off shore, in the Pacific Rim, or in Europe or other places that are going to make better use of them than we are prepared to do.

Representative **Scheuer**. Nobody wants that, obviously. But it seems to me that we have had some success—please contradict me if I'm wrong, Bill Woodside or anybody else—where the kids have turned the schools off, there has been no learning experience, and where the kids have gone to a corporation and they seem to be turned on by the world of work. Are we to say that corporations can't be enabled to give kids reading, writing, and counting skills?

I would be willing to give them not only a tax deduction for teaching these skills where they haven't been learned at school, but I'd give them a tax credit for doing that. It is so absolutely indispensable that that process take place.

Mr. **Woodside**. It is also equally as important that we don't let the education system itself off the hook. The corporation's activities in that particular area, the literacy area, and the learning of basic skills is really a remedial action just like Jim Murphy is talking about in some of the community colleges. But it has to be viewed that way.

I would certainly be opposed to some kind of tax advantage for doing that because you are going to shift the balance and take away the effort of trying to improve the basic system.

My big problem with the Lang program is that it does not deal with the system itself. It doesn't do anything about improving education. It works around it to try to find other ways to make it easier for these kids to get through, but it does not address the basic difficulties of the system. Plus the fact it is like playing roulette with kids' lives. One class per school? What the hell is that?

Representative **Scheuer**. And relying on the charitable instincts of a few enlightened businessmen. What the hell is that?

Representative **Williams**. Congresswoman Lowey.

Representative **Lowey**. First of all, I would like to thank you all for your outstanding presentations. This being my first day as a new Member in Congress, I really appreciate it.

As one who has been working to create public-private partnerships for practically my entire professional life with Governor Cuomo, my question to you is, How can we encourage corporations to replicate these programs in times of budget deficits?

For example, we know that American firms on the average spend 1 percent of their payroll on employee continuing education programs and training compared to Japanese firms which spend an average of 2.5 percent to 3 percent.

While we are in a state of budget deficits and while we are saying that the American school system should do better, if we know that programs such as Gene Lang's, who has been a neighbor and friend for 25 to 30 years, work, what kind of incentives do you think we should provide to the private sector to encourage the replication of these programs?

I have seen dozens of programs really work in communities. They are outstanding. We know the answers. We know what works. But we are still caught in this morass and we can't seem to replicate it. I am talking from my own base, New York State, particularly New York City and Westchester County. While we are looking for the funds in the Federal Government, how can we encourage corporations to become more active?

Mr. **Woodside**. There are, I guess, any number of answers to that.

If you look at the nonprofessional world outside of the teaching community, corporations are probably way ahead of the average people in the community about seeing the necessity. Because they are looking down the line 10 years from now and looking at these competitive factors, looking at their source of employees. So I don't think they need incentive. What corporations need are programs that work, and they would be perfectly willing to fund those kinds of programs.

I am not in favor of the private sector substituting for what I think is legitimately and genuinely a public sector responsibility. If this country can't even begin to address a public education system when that was really one of the founding principles of this Republic, we are in really tough shape.

I am all for having community support, which we have, but there have to be successful programs.

In New York City we have 60 partnerships out of the 100 high schools, and it is probably most of the worst. But they don't amount to much. They are basically dealing in fringe areas. They don't really deal with the system.

We were the first corporation in New York City, American Can, to join with a high school, Martin Luther King Junior High School, right in back of Lincoln Center, an all-minority high school of 99 percent minority. The first 4 years we were in that school we had three school chancellors and four principals.

I sometimes sort of laugh at some of the comments about the rigidity and the impossibility of moving tenured principals from one school to another. We couldn't hang on to one long enough to have any kind of continuity in the programs we were working with.

You print brochures, you buy uniforms for the kids, you teach some classes to supplement with some of your knowledge some of the things that they don't have. You do a lot of things that are helpful. You develop club activities and you try to give a sense of family and community. We did outreach with all the parents in the community. This was a druggie school when we started. We managed to stop most of that.

But it still wasn't dealing with the basic structure of the education that is given in that school. That is why I have moved on to some of these ways to try to directly impact the structure of education.

I get appalled at the numbers. Imagine my business partners here thinking about a company that has 1,000 plants, that has 100,000 employees, that has a million clients, but of those clients 80 percent are minority and 60 percent of that million come from families below the poverty line.

You are riddled with bureaucracy, with union regulations. You have a budget that is larger than most of the States in the United States, $5.7 billion a year. It is larger than most Third World nations'.

In New York it is not a question of money; it's a question of trying to focus on those things that need to be done. That is what we are encouraging as a business community and the balance of the community to get the school system to do. That's why the new chancellor, who is having a very rough time, as you can see.

Mr. MacAllister. It seems to me it is a question of both. First of all, as a matter of survival, any business that understands its competition and its future has to invest in education for its people. I would rather spend my money investing on technical education than reading, writing, and arithmetic.

For that reason, I feel it is a responsibility of business to not only educate their employees in whatever areas it is needed, but it is also imperative to focus on the public school system as the primary delivery system for education, and to cooperate with them and work with them in building up a system whereby we utilize all of the youth support organizations in a community, to give supplemental help to the school system, to have the whole community focused on the school system.

In the private sector, matching grants always generate more contribution and more interest. It seems to me, without spending a whole lot of additional dollars, if the Government would put out some matching grant opportunities for businesses and individuals to identify effective programs that work, where the communities really support the primary delivery system, the public school system, and offer to match private funds that are raised to support that interrelationship between community and school, I frankly think it could do a lot of good.

Mr. **SEMERAD**. Mr. Chairman, Congressman Williams alluded to something at the beginning of my remarks. The American Express Co. 6 years ago established the Academies of Finance to take juniors and seniors as a curriculum enhancement—not a reform effort by any means—and it had enormous success.

We have a number of programs in New York City and 34 around the country. Lou Gerstner basically is taking this public with the National Academy Foundation.

We talked about the replication of something that works. That is precisely what we are doing as a way that business can become a good partner. Not only in trying to meet the needs of our entry level workers that we have. We are going to have to hire 75,000 workers in the next 5 years and frankly there is some question where we are going to find those people.

The up-front investment and the question of what happens 10 years from now, for our company, is today. We are already there, and we have decided we need to work with kids that are in school.

Rather than being threatening to the establishment by talking reform or anything else, we have made a conscious decision. We want to be an enhancement, a supplemental effort. We are taking this into new curriculum areas in the rapidly expanding employment opportunities for young people in our new kind of economy. It's not just finance, but it is travel and tourism and it's communications and information sciences.

So we have made a decision to invest our money and we are now gathering partners from the private sector, but this goes to the local community, to the schools. We think it's a good idea. It is very hands on and it is very specific.

Representative **WILLIAMS**. Mr. Donley, did you wish to comment?

Mr. **DONLEY**. I wanted to make a couple of comments, Mr. Chairman.

First of all, I say this in all deference to my colleagues here and the people on your panel from the city of New York. I say don't judge the Nation by New York City and I won't judge the Nation by Washington.

It is admirable that great corporations like American Can, which flies under a different banner now, and American Express do these things that we have heard enunciated. But there are an enormous number of smaller companies out across this country who are already deeply engaged in the education systems in their communities.

I defer with great admiration to Mr. Lang, but the program that I described to you at the beginning that we are conducting in Allentown, PA, I hold in high regard. And we have comparable programs in Calvert City, KY, and Oshkosh, WI, and Decatur, AL, and so forth.

I would say let's exhort the middle level of the business community to take a more active role in education in their communities in all 50 States, because there is an enormous resource there that hasn't yet been adequately tapped, although a great deal is in fact being done.

Representative **WILLIAMS**. Mr. Donley, I am pleased that you mentioned that because I wasn't quite sure how to do it without being misunderstood. There are eight of us currently discussing this issue, and of the eight, one is from Pennsylvania and all but one of the others are from New York. So it is not surprising that we are talking about the difficulties of an education system in a great and wonderful American city but one which is almost unique to itself with regard to these problems.

Mr. Murphy.

Mr. **Murphy**. The activities of my organization are as a statewide bankers' association with 200 banks all over the State. There isn't an urban center in the State of New York that doesn't have the same problem on a smaller scale than New York City. I am talking about Wyandanch, Freeport, Yonkers, Mount Vernon, Newburgh, Albany, Schenectady, Syracuse, Rochester, Buffalo, and Binghamton. They are all experiencing this problem. These are places experiencing the demographic and social changes of the last couple of decades, where you have lots of disadvantaged people, lots of poor people, people of color, new people, people with problems of English as a second language.

While it is a very dramatic phenomenon in New York City because everything tends to be exaggerated through the New York prism, as Mr. Woodside mentioned, the Schools and Business Alliance which the Governor established has had as its primary objective over the first couple of years setting up alliance development committees in all of those communities that I have just mentioned.

In every one of those communities outside of New York City—New York City is moving more slowly, as Mr. Woodside indicated—but in virtually every one of those cities there is now a vibrant business-schools alliance to deal with the same kinds of issues we have been talking about here. This is in a State that 5 years ago had double digit unemployment, a State that now, thank God, has an unemployment rate below 4 percent. It is jobs chasing people and the business and local community are getting into it with a great emphasis.

Representative **Williams**. With reference to the difficulties, the education system in New York City is somewhat different than that, though. The point I want to make is this. Americans tend to look to our schools for answers, and we do that in a rather impatient manner.

Maybe one of the great examples of that is that the resolution—I don't use that term to mean the problem has been resolved—of the civil rights difficulties in America was finally handed to the schools. The teachers and principals and superintendents were told, "here, you solve it," solve it through the school systems.

The Supreme Court insisted, I think correctly, on that as a primary avenue and path for integration. We want to solve the problems of childhood nutrition primarily one way in America—through the schools.

In major urban centers the enormous economic, racial, and cultural difficulties that you have there cannot be resolved by simply turning it over to the schools. As big and broad and masterful, as genius ridden as the American education system is, we cannot call upon it to solve all of our problems and do so with great impatience and then when they aren't resolved look at the school system and say, you failed us, and it's because of teachers unions or it's because of lack of Federal money or it's because of student defaults.

It seems to me as an educator that while we want to continue to have great reliance on our school systems to help us with the resolutions of these problems, there are times—and those times are occurring very rapidly now in the major cities in America—when because the problems are so great you are going to have to look not only to your school systems, but also to other entities perhaps not yet created to help resolve massive problems in New York City, Detroit, Los Angeles, Chicago, and a few—just a few—other places.

Problems in Buffalo or Butte, MT, or Denver, CO, or Englewood, CO, where Mr. MacAllister's home is, the problems in those places perhaps are still resolvable through the public school systems, but I don't believe that's true in New York City. That is why I say we are talking about a problem here that is unique to a city, unique to itself, and to think that schools can solve New York's problems, I submit, it won't.

Mr. Woodside.

Mr. WOODSIDE. I couldn't agree with you more. One of my other favorite speeches is accusing the education community of trying to take on the ills of the world and in a sense agreeing that they can solve them when they cannot at all. The very programs that I talked about, WIC and immunization and day care centers and medical coverage for the disadvantaged, all those things are totally out of their control. They don't control the dropout rate. They do in some small degree, but the education community is only one of the factors that leads to a high dropout rate, and a small one, as far as I am concerned.

I think that is of major concern. It is certainly a major concern in big cities because I think the system itself is taking on too much responsibility for every social ill in the United States.

Representative SCHEUER. What kind of institution should we create to take on the social ills?

Mr. WOODSIDE. I don't think we should create a massive institution. You have a lot of devices right now. WIC is an ongoing program. All it needs is a few more dollars. The day care centers have just been set up as part of the new welfare bill, which, incidentally, is a form of continuing education at any rate as far as young mothers without a high school degree. As part of receiving welfare they have to go back and make some effort to get their degree.

So there are a lot of things that are changing and there are existing and established ways of handling those. I don't think you can create some sort of massive structure and call it "the organization" to solve all the social and educational ills of the United States.

Representative WILLIAMS. I was pleased to find members of this panel stating the realization that the private sector cannot solve nor is it appropriate to call upon the private sector alone to solve these problems. To give you a personal bias, I think if we turn the education of the American public over to the private sector, we would have a chaotic system, and I think many of you might agree with that.

We have a massive, incredible problem in the United States in our schools. As wonderful as Live Aid was, as big an impact as that made on feeding the hungry in the world, it didn't begin to feed the people in Africa. The public has to do it. As massive as the private aid to the earthquake victims in the Soviet Union will be, it won't touch it. Willy Nelson gave it up. He said, "I didn't understand. I'm touching one one-thousandth percent of the need of the agriculture economy in the United States with Farm Aid."

He's giving it up. He might do a couple more. I had lunch with him. He's giving it up. He said the public has to do the public's business. Precisely.

So the real question before America is not can we turn it over to the private sector, can we turn it over to the local government, can we turn it over to the school districts? It is how do we pull together in a more aggressive, coordinated, cooperative fashion than ever before in history to attempt to save ourselves, meaning continuing the United States as the world leader, No. 1, first?

That is what faces us, and we are only going to do it with a massive cooperative effort. I submit that it is not going to be cheap. I would like to think we could do it with a trust fund, and I have an idea for a trust fund which is very similar to yours, to a smaller degree, but it won't work that way alone.

I think it is going to take additional dollars, but more important than that, it is going to take very aggressive leadership. I haven't seen that, frankly, either from the American people or their elected officials in a long time. I think the clock is ticking and time is running out.

Mr. Chairman, let me turn the gavel back to you now. I appreciate the opportunity to call on these witnesses.

Representative SCHEUER [presiding]. Do you have any questions, Congresswoman Lowey?

Representative LOWEY. No.

Representative SCHEUER. Let me thank this panel for a very fascinating presentation of the issues—though a little bit discouraging in some ways. You did bite the bullet and you were very forthcoming and honest about the awesome order of magnitude of the problems that face us. If we don't at least recognize the magnitude of the problems, we are never going to make the effort that is absolutely demanded.

The motto of the State of California is "send me men to match my mountains." We need a motto for New York, "Send us men and send us funding to match our incredible education problems."

You have all been really provocative and thoughtful and creative and inventive. We very much appreciate this really outstandingly fine panel.

I am going to ask unanimous consent that if any of the members have any additional questions that we will hold the record open for 10 days or 2 weeks for your responses.

Thank you very much for a wonderful panel.

We will now go to the final panel of the day, Clyde Prestowitz, senior associate of the Carnegie Endowment for International Peace, and Robert Reischauer, senior fellow in economics of the Brookings Institution.

Mr. Reischauer was the senior vice president of the Urban Institute for 5 years. Before that he helped establish the Congressional Budget Office, setting up their new office in 1975 and then serving as deputy director and the assistant director for human resources and community development.

Mr. Reischauer is an economist who has written extensively on Federal budget policy, Congress, social welfare issues, poverty, and State and local fiscal problems.

His last notable contribution to the public will was designing the basic framework, although not all of the details as they emerged, of the Dukakis tuition assistance proposal.

We are delighted to have you here and we apologize for the late hour.

Mr. Reischauer, why don't you address the problems that have been inundating all of us this morning, and particularly address the problem which is the subject of this hearing, which is whether the time has come to extend the public education system down to include an assured Head Start experience for every kid and up to include postsecondary of 2, 3, or 4 years along the lines that the Truman Commission recommended 41 years ago.

Incidentally, were you here when I read that quote from the Truman Commission report?

Mr. REISCHAUER. No, I wasn't.

Representative SCHEUER. It is very short. This was issued by the Truman Commission on Higher Education:

"We have proclaimed our faith in education as a means of equalizing the conditions of men. But there is grave danger that our present policy will make it an instrument for creating the very inequalities that it was designed to prevent. The time has come to make education through the 14th grade available in the same way that high school education is now available."

That was 1947, just about midway between the point at which we started our kindergarten to 12th grade education system and the present. They recommended an extra 2 years. I don't think it would offend anybody's sense of logic if the suggestion were made that 4 years of postsecondary education should be an entitlement instead of 2 years.

We mentioned the cost-benefit analysis just done by the House Education and Labor Committee which indicated that the GI bill of rights on which we spent about $8 billion was probably the most cost-effective capital investment we have ever made in education, with a cost-benefit calculus of somewhere between 5 to 1 and 12 to 1. And that doesn't even count the reduction in social services as a result of education; it doesn't count the increased taxes that the veterans paid when they got out into the work force.

The question arises, if it was that good an investment, can we afford not to make it now in educating all American kids, considering the education crisis which you just heard so brilliantly described, considering the perilous state in which our education system finds itself now?

Please take 5 or 6 or 7 minutes and ruminate a bit and we will have some questions for you and then we will go on to Mr. Prestowitz.

STATEMENT OF ROBERT D. REISCHAUER, SENIOR FELLOW, THE BROOKINGS INSTITUTION

Mr. REISCHAUER. Let me start by making a few observations on the proposal that you just outlined. These are my personal views.

I think that the expansion of Head Start, making it an entitlement for all eligible children, would be a definite step in the right direction, one which the Nation would look back upon as one of its wiser investments.

However, transforming college education into an entitlement, if that involved public subsidies, would probably be a misuse of scarce resources. Given that we have limited resources, I would opt to put more at the front end of our educational system rather than at the back end.

We do a poor job educating young Americans, particularly in basic math and science. Adding more years is not a substitute for higher quality at the earlier years. Education is a cumulative process. If you haven't learned how to add in the fifth grade, you are not likely to go into engineering in college.

What I would like to do now in the few minutes I have is summarize very briefly the prepared statement that I prepared for the subcommittee. It is basically a plea that asks those of you who are concerned about the access problems in our postsecondary education system to look at the long run, to examine critically the current set of programs and to ask whether the structure and approach that we adopted in the 1960's, which has served the country quite well in the past 25 years, are going to be capable of carrying the burden we are going to put on them in the next century.

We have to look at the access problem in a longer run perspective. We tend to see a problem with our programs and patch them up as we go along without stopping and asking, "Is there a better way to do this? Is this approach going to collapse some time down the road?"

I argue in my prepared statement that there are five developments or trends going on in America which suggest that the current approach to postsecondary finance is going to be rendered increasingly inadequate. These five trends are not new or revolutionary, you are quite familiar with all of them.

The first is that postsecondary education costs tend to rise faster than the rate of inflation. They have in the past; they will in the future.

Education is a labor-intensive activity. There are not a lot of cost-saving technologies which seem to be adopted in this sector. If relative prices rise in this sector, either the expenditures on existing programs are going to have to rise faster than inflation or we are going to have to reduce the adequacy of these programs.

The second development relates to the fact that incomes in this country haven't been rising rapidly nor are they likely to rise rapidly in the future.

The Joint Economic Committee has done some pioneering work pointing out the anemic growth of family incomes. Productivity growth has been rather weak. We know that fringe benefits are going to grow as a fraction of total compensation in the future. We know that we are going to have some tax increases that are going to reduce the disposable incomes of American families.

This suggests that the kind of slow growth of disposable incomes that we have experienced over the last decade and a half will probably continue in the future, making it harder for many Americans to accumulate the resources needed to send their children to college.

Third, and this is a bit more speculative, I think we have to examine at what is likely to happen to home equity. Many middle-class Americans have been able to send their children to college because they have been able to borrow against the equity that has built up in their homes. Home equity has expanded very rapidly in the postwar period because house prices have gone up very rapidly.

Why have house prices risen so rapidly? One reason is that there has been a tremendous increase in household formation. Another reason is that mortgage interest rates, up until the early 1980's were very low in real terms. A third reason is that we had very rapid inflation, and a final reason is that we had increasing marginal tax rates, which meant that the benefits from owning a house were constantly escalating.

Well, none of these is likely to persist into the future. So the growth of home equity should be expected to slow down.

Some numbers which I have put together suggest that, in fact, this has happened in the 1980's. The value of aggregate home equity in real terms declined between 1980 and 1987. This is the first period in postwar history longer than 1 year over which that has happened. If there is less accumulated home equity, more people will come to the Federal programs and say, "I need a hand here to send my child to college."

A fourth development is the demographic trends among potential students. These trends are clear and obvious to everybody. More and more students are nontraditional. They are older, they are more likely to be married, and they are more likely to be financially independent from their parents. An increasing fraction of college-age students is coming from ethnic and racial minority households that have fewer assets, lower incomes, and are less able to afford college. Furthermore, a growing fraction of future students will come from single-parent families or families that involve a remarriage. Such families tend to have a harder time coming up with money for college.

The final development of relevance is that the Federal Government is in a serious fiscal bind. It has a big deficit that will have to be reduced. This will put pressure on all kinds of spending programs.

If one puts all these factors together, they suggest that, over the next two decades or so, a lot of forces will be pushing to increase the burden on Federal postsecondary student aid programs at a time when it is unlikely that we will have the resources needed to expand these programs greatly. Therefore there will be a conflict. The conflict will have to be resolved by reducing grant or loan levels or by tightening eligibility requirements. More than likely some of the gains that were achieved over the 1962 to 1980 period will be sacrificed.

I don't think we have to go this direction. There are other approaches to student aid that can preserve the advances that we have made in the past but at a lower budgetary cost.

The plan that I described in my prepared statement and that Governor Dukakis put forward during his campaign represents one alternative. It is an alternative that shifts the cost of the current student loan programs onto the borrowers while at the same time providing them with a mechanism for spreading the payment burden over their entire working lives.

I suggest that this is an approach that could both maintain and expand access and free up resources. These resources could be devoted to higher priority educational uses.

I would include increases in Pell grants, Head Start, in chapter I, and in some kind of effort to increase the basic math and science skills of the average American student among those higher priority uses.

The cost of these initiatives would be limited because we would be using freed up resources. By restructuring the student loan programs, we need not sacrifice access.

I will leave it at that.

[The prepared statement of Mr. Reischauer, together with an attachment, follows:]

PREPARED STATEMENT OF ROBERT D. REISCHAUER*

In the 1960's, Congress established a number of federal programs that were intended to help young Americans and their families finance post-secondary education. By and large, these student aid programs have served the nation well. Together with a tremendous expansion in the capacity of public institutions, they facilitated a significant increase in post-secondary enrollment and helped to increase college access by minorities and those from families with limited means.

Since these programs were designed, changes have taken place in American society, in the nation's economy and in the financial condition of the public sector. These changes have strained the federal student aid system and Congress has responded by enacting various modest adjustments to the existing programs. For the most part, these incremental responses have proved adequate. While the nation's higher education programs could be doing a better job on some fronts, post-secondary education is not facing a financing or an access crisis at this time. The fraction of high school graduates enrolling in college is at an all time high and the payoff to post-secondary schooling seems to be growing even though the supply of college educated workers has increased substantially.

While the current situation does not cry out for immediate reform, this should not be a time of complacency. The existing student aid system continues to be pressured. Criticisms of its inadequacies, inefficiencies and inequities are heard with increasing frequency. And growing numbers of parents are questioning whether they will have the resources they need to send their children to the colleges of their choice. In this environment, policy makers should be looking to the future and asking the following questions.

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> What policies and programs are needed to preserve and expand upon the achievements of the past quarter of a century?
>
> Can current programs, with modest amounts of further tinkering and reform, carry the load in the the next century or will the nation have to consider fundamentally different approaches to helping students and their families finance post-secondary education?

I looked at the existing student loan programs from this longer run perspective in a paper I wrote for a conference on alternative student loan policies sponsored by the College Entrance Examination Board (see attachment). In that paper I concluded that the current federal student loan programs suffered from a number of weakness that are likely to become more serious in the future. I also concluded that these problems are not likely to be solved through incremental reforms and, therefore, suggested that policy makers should begin to consider fundamentally different ways to help students finance their post-secondary education.

To start this process off, I developed a radical alternative to the current federal loan programs which I called the Higher Education Loan Program (HELP). Under its provisions, all students could borrow to finance their post-secondary education from a new educational trust fund. The trust fund would be financed by revenues raised from increased payroll (FICA) taxes imposed on borrowers. Under this plan, the amount by which any borrower's payroll tax would rise would depend upon the amount borrowed by that individual. Thus, the loan repayments made by each individual would be a function of the amount borrowed and that individual's lifetime earnings. As is the case in our social insurance programs, there would be a certain amount of intra-program redistribution from borrowers with high lifetime earnings to those with low lifetime earnings. In other words, some borrowers would not repay the full cost of their loans, while others would pay more than the full cost. However, the repayment rate per $1,000 borrowed would be set so that each cohort of borrowers would pay for the full costs of its loans thus eliminating any transfer from the general taxpayer to those who borrow to finance their post-secondary educations. In many respects, Governor Dukakis' STARS proposal is similar to this plan.

The approach followed in HELP and STARS has many advantages as well as some disadvantages. However, rather than elaborating on the strengths and weaknesses of this approach, I would like to use this opportunity to explain why I think Congress should begin examining fundamental reforms like these even as it seeks to make short-term improvements in the current programs. My basic argument is that the existing student loan programs will be rendered increasingly inadequate by five probable developments. None of these represents a particularly new or revolutionary trend. No one, taken alone, would be sufficient to justify fundamental reform. However, taken together, they could create a situation that would require a very different approach to student assistance some time in the not-to-distant future. Thus, Congress may have to consider fundamental changes in the student aid system if the nation wants to ensure that a majority of its future high school graduates has access to a post-secondary education.

The first development that will make it increasingly difficult to continue along the current path is the tendency for the direct costs of attending institutions of higher education to rise faster than the overall price level. Over the 1963 to 1987 period, the costs of attending private universities rose by an average of 8.0 percent per year; those for four-year private colleges rose by 7.7 percent per year; those for public universities rose by 6.6 percent per year; those for four-year public college rose by 6.8 percent per year; and those for public, two-year institutions rose by 7.0 percent per year. Broad based measures of inflation, such as the GNP deflator and the personal consumption expenditure deflator, increased at considerably slower rates over this period. The annual average increase in GNP deflator was 5.5 percent while that for personal consumption expenditures was 5.4 percent.

In the future, the pace at which college costs will rise may dip below broader measures of inflation from time to time as happened during the 1970's. However, over the long run there is every reason to expect the pattern of relative prices experienced during the last quarter century to continue. Education is a labor intensive activity that resists cost-saving technologies. Moreover, the educational sector does not face many of the market incentives that drive private firms and industries to pursue efficiencies. Universities and colleges are complex non-profit institutions that produce a product whose quality is difficult to measure. There is little price competition between institutions, and parents and students often seem to regard a higher price to be a measure of institutional quality. Price competition is made more difficult by the bewildering range of prices that each institution charges its students for the same services. Given these circumstances, it is not surprising that educational costs, like those for medical care, tend to rise faster than the general price level. This pattern implies that the costs of federal student aid programs will have to rise faster than inflation if the adequacy of these programs is to be maintained.

The second development that is relevant to the future adequacy of the existing student aid system is the recent slowdown in income growth. While real median family income grew by 43 percent between 1960 and 1973, there has been little improvement since the early 1970's. In 1987, median family income was only 0.1 percent above the 1973 level. Even families who soon will have to consider college costs have not experienced much income growth recently. The real median income of families with children in the 6 to 17 age range rose only 1.4 percent between 1980 and 1986. Over this same period college attendance costs increased between 23 and 41 percent in real terms.

While we can hope that family income will begin to grow again at its pre 1974 rate, there are few reasons to expect this to happen. Productivity increases, which ultimately constrain the growth of real wages, are likely to remain fairly anemic in the future, in part, because the nation has not been investing a great deal in new plant and equipment. Nor will family income be boosted much by the increased labor force participation of wives, many of whom entered the labor force over the past three decades. The growth of cash incomes is also likely to be restrained by the continued expansion of fringe benefits. The rapid rise of medical insurance costs and the increased benefits mandated by the 1986 ERISA amendments, imply that fringes, rather than wages and salaries, will constitute a growing share of the average worker's total compensation. It is also probable that the future growth of disposable family income will be curbed by tax increases designed to reduce the budget deficit. If disposable family income does not keep pace with the rising cost of college attendance, a growing fraction of American families will turn to federal student aid programs for assistance.

Demographic trends represent a third development that is relevant to the question of whether the existing approach to student aid will be adequate for the future. The compositions of the youth and college populations are changing in three important respects. First, a growing fraction of post-secondary school enrollment does not fit the student stereotype of a 18-22 year old who is dependent for some financial support on his or her family. In 1986, 42 percent of enrolled students were married or over age 24. The comparable figure for 1960 was 31 percent. Such students are likely to be neither financially dependent on their parents nor able to pay for their educations from their own earnings and assets. There is every reason to expect the ranks of these non-traditional students to grow in the future.

A second relevant demographic trend is the shifting racial/ethnic composition of the youth population. As a result of differential birth rates and immigration, the fraction of the youth population that is made up of non-Hispanic whites has fallen steadily. In 1970 non-Hispanic whites comprised about 80 percent of the 15-19 year old age cohort; by

1987, this figure had slipped to 73 percent. Population projection indicate that non-Hispanic whites will make up only 62 percent of this age group by 2020. Since black and Hispanic families tend to have lower incomes and fewer assets than non-Hispanic white families, it is reasonable to assume that the fraction of students who need some form of financial assistance will grow in the future.

A third demographic trend of importance relates to the erosion of the traditional American family. While just over one-third of marriages taking place in the 1960's ended in divorce, slightly over half of all marriages taking place in the 1980's will suffer this fate. In addition, the fraction of all births that are out-of-wedlock has risen from 5 percent in 1960 to 23 percent today. As a result of these trends, an increasing fraction of future college students will come from homes which do not contain both of the student's biological parents. Some will come from single-parent families which tend to have low incomes and, therefore, have difficulty helping with large educational expenses. Others will come from remarried families which may be less able to contribute because they are making child support payments to another family or less willing because they feel that the responsibility should lie with a noncustodial parent.

A fourth development that could undermine the efficacy of the current approach to student aid is related to the future growth and composition of household wealth. Few American families are capable of paying for their childrens' educational expenses out of their current income. Most borrow or dip into the wealth they have accumulated from past savings and investments. For many this means tapping the equity they have built up in their homes. In fact, such equity constitutes the largest component of the net worth of most families. For example, in 1984 home equity made up 61 percent of the net worth of households with a 45-9 year old head.

Because home ownership has been so widespread and home values have risen so rapidly over the post war period, many families have been able to borrow against their home equity to finance the college expenses of their children. However, this experience many not be repeated in the future. Home ownership rates have fallen a bit since the late 1970's as some of the tax advantages of home ownership have been reduced. It is also possible that the rapid growth of home values may abate. The soaring residential real estate prices of the past were driven by high rates of household formation, rapid inflation combined with low real mortgage rates and rising marginal tax rates. None of these seems to be on the horizon. While the number of households grew by 20 percent in the 1960's and 27 percent in the 1970's, they are projected to grow by 17 percent in the 1980's and by only 12 percent in the 1990's. The political and monetary authorities seem determined to keep inflation under control. Real mortgage rates, which averaged 1.7 percent during the 1970's, have averaged 4.7 percent in the 1980's. The top federal marginal tax rate has dropped from 70 percent to 50 percent to 33 percent. Already there is some indication that the growth of home equity may be slowing. During the 1950's, 1960's and 1970's the average amount of home equity per owner-occupied unit increased by 25, 40 and 213 percent respectively. In the first half of the 1980's (1980 to

1985), the increase was only 11 percent, well under half the rate of inflation.

In the future, college expenditures may have to compete more aggressively with other uses for whatever amount of home equity builds up. The Tax Reform Act of 1986 calls for the gradual elimination of interest deductability on nonmortgage consumer credit. In response to this reform, lenders have actively promoted home equity lines of credit. These credit lines offer a means of retaining the interest deductability associated with borrowing for automobile purchases, home improvements, debt consolidation or other personal credit needs. If substantial portions of home equity are used for such purposes, less will be available for educational uses in the future. While families may be no less able to take on the added burden of an educational loan, the after tax price of that loan will be higher and this may discourage some.

The final development of relevance to the future, is the constrained fiscal position of the federal government. The need to reduce the budget deficit and increase national saving are likely to limit the growth of spending for a number of years. There are many strong claimants vying for whatever expansion in spending is allowed. The savings and loan problem, the modernization and clean up of the nation's nuclear weapons plants, investments in children at risk, environmental initiatives, long term care and the space station are just a few of these. In this environment it will be difficult to expand the federal resources devoted to post-secondary student aid in a significant way.

The five developments that I have discussed are not inevitable. However, they are likely. Post-secondary education costs will probably continue to rise faster than the overall rate of inflation; real family incomes and home equity will probably grow relatively slowly; more college students will probably come from families with modest means; and the need to reduce the deficit will probably hold down government spending. Under these circumstances the burden placed on the student aid system will grow faster than available resources. Therefore, eligibility for these programs will have to be cut back and the size of the grants and loans relative to the cost of attendance will have to be reduced. If this happens, the gains made during the 1960's and 1970's will begin to erode.

To guard against this possibility, Congress should begin to examine alternative approaches that might maintain past accomplishments without imposing a larger burden on the budget. The HELP and STARS plans represent one such approach. They would shift much of the current federal expense for student loans to the students, providing them with a mechanism to pay for these costs over their working lives. This would free up the resources that will be needed to expand the grant programs. There are other proposals that also may be better suited to the social, economic and demographic environment that will exist in the next century. They too should be examined.

Even though there is no immediate crisis, it is time to begin exploring alternative student assistance policies. If fundamental changes are called for, they will take time. They must be well thought out and their ramifications examined in depth. Controlled experiments may be called for. If a new approach is pursued, it will have to be implemented gradually so as not to disrupt existing institutions or place an undue hardship on students. As the recent tax reform experience showed, major policy shifts result from decades of debate and study.

RADICAL
REFORM
OR
INCREMENTAL
CHANGE?

Student Loan Policy Alternatives for the Federal Government

Lawrence E. Gladieux, Editor

New York, College Entrance Examination Board, 198~~8~~9

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HELP: A Student Loan Program for the Twenty-First Century

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Largely because recent federal student aid policy has emphasized loan programs over grant and work-study programs, student loans have become increasingly important during the past fifteen years.[1] Yet, as the reliance on loan programs has grown, so too has a sense of disquiet among educators, policymakers, and, to some extent, the public. Some of this disquiet has arisen because greater dependence on loan programs has made their limitations more apparent. But uneasiness also has developed because several social and economic trends appear to be rendering the current student loan programs increasingly incapable of meeting the future needs of the nation. These trends include the rising costs of attending college, the reduced ability and willingness of parents to save for their children's educations, changes in the structure of the American family, and constraints on the federal budget.

Awareness of the present shortcomings and of the possible future inadequacy of the existing student loan programs has stimulated a search for new approaches. The Higher Education Loan Program (HELP) proposal described in this essay represents one such approach. It is offered in the spirit of broadening the range of options that can be considered when these issues are next discussed during the 1991 reauthorization of the Higher Education Act.

The HELP proposal would greatly expand and simplify the federal government's student loan policy while reducing the true public sector costs of student loans. These seemingly conflicting objectives could be achieved if unsubsidized student loans were provided through a social insurance program — a higher education loan trust fund. Students who borrowed from this trust fund would be required to repay their loans over their full working lives through earnings-related payments similar to the Federal Insurance Contributions Act (FICA) taxes that support Social Security and Medicare. These payments would be set at the level needed to repay the trust fund for the full cost of the borrowing done by each cohort of students.

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* The views expressed herein are those of the author and should not be attributed to the Brookings Institution, its staff, trustees, or funders. Rub Krebs and Lorelei Stewart deserve credit for their skillful simulations of HELP and their able research assistance.

[1] Although only 21 percent of federal aid was provided in the form of loans in school year 1975-76, by school year 1985-86, loans constituted some 64 percent of all federal student assistance. In school year 1985-86, grants made up 31.5 percent of federal assistance and work programs the remainder. Janet S. Hansen, *Student Loans: Are they Overburdening a Generation?* (Washington, D.C.: College Entrance Examination Board, February 1987), Table 16.

This proposal represents a significant departure from current policy. Such a radical change is justified only if two conditions are met. First, existing programs must be seriously flawed or likely to become woefully inadequate in the future. Second, the current approach must not be amenable to repair through incremental reform. Whether these conditions are met in this case is debatable. Yet, as the next section of this essay suggests, at least some observers have concluded that fundamental structural reforms are needed.

What May Be Wrong with Current Policy?

The shortcomings, extant and potential, of the existing federal student loan programs can be grouped into four categories relating to budgetary effects, equity considerations, effects on borrowers' behavior, and administrative issues. These four classes of shortcomings can be better understood after a brief review of the major federal student loan programs.[2]

The Major Loan Programs—a Brief Review. The Guaranteed Student Loan (GSL) program is the primary federal student loan program. It provides more than five of every six federal student loan dollars. The GSL program subsidizes and guarantees educational loans that private banks make to students. The subsidies, which amount to roughly fifty cents for each dollar of loan issued, primarily take the form of interest forgiveness and below-market interest rates. While a borrower is enrolled in school or is in a grace or deferral period, the loan principal need not be repaid, and the federal government pays the interest costs by giving the bank a payment equal to 3.25 points over the bond equivalent of the 91-day Treasury-bill rate.[3]

After a student has left school and is repaying the loan, the borrower is charged a fixed, below-market interest rate, and the government pays the bank a "special allowance," which varies according to the level of market interest rates.[4] GSL borrowers generally are given up to ten years to repay their loans. Limits are placed both on the total amount a student can borrow and on the amount a student can borrow in a single year.[5]

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[2] Readers who are familiar with existing loan programs can skip to the next section, which describes the HELP proposal.

[3] The length of the grace period ranges between six and twelve months, depending on the year in which a student's first GSL was issued. In addition, payments are deferred if the borrower is serving in the military, is a Peace Corps or Action volunteer, is teaching in a teacher shortage area, or is temporarily disabled or unemployed. Interest costs for the grace and deferral periods are paid by the government. Payments for loans issued before 1987 are 3.5 percent over the bond equivalent of the 91-day T-bill rate.

To be eligible for a GSL loan, a student must meet a needs test. The needs test examines the financial status of the student's family each year in which the student wishes to borrow and relates that status both to the cost of attending college and to other assistance the student may receive. Currently, a student from a family of four with average financial assets, home equity, and expenses attending an average public college will qualify for a GSL if the family's income is below roughly $33,000. The comparable figure for a student attending an average private college is about $50,000, but an income cut-off of well over $100,000 is possible for a student attending a high-cost school if the family has few assets, high medical expenses, and another child in college.[6] Students who are not significantly dependent on their families for financial support are judged on the basis of their own needs and resources.[7]

In addition to GSLs, the federal government offers the Parent Loans for Undergraduate Students (PLUS) and Supplemental Loans for Students (SLS) programs. These programs provide shallow subsidies for the educational loans that private banks make to parents, independent students, and graduate students.

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[4] The special allowance, which is paid quarterly, is the difference between the interest rate charged the student and 3.25 percentage points above the bond equivalent of the 91-day T-bill rate. Students who took out their first GSL loan before 1981 pay 7 percent. Those who began to borrow between 1981 and September 13, 1983, pay 9 percent. GSL participants who first borrowed after September 13, 1983, but before July 1, 1988, are charged 8 percent, and those who first borrowed after July 1, 1988 are charged an interest rate of 8 percent for their first four repayment years and 10 percent for the remainder of their repayment period.

[5] The annual borrowing limits are $2,625 for first- and second-year students, $4,000 for third- and fourth-year students, and $7,500 for graduate students. The caps on the total amounts that can be borrowed are $17,250 for undergraduates and $54,750 for graduate students. In addition, the amount borrowed in any single year cannot exceed the cost of attending the institution (tuition, fees, room, board, books, supplies, etc.). The student does not receive the full loan amount because a 5-percent origination fee is deducted from the loan amount. In addition, a guarantee fee of up to 3 percent of the face value of the loan may be imposed.

[6] These estimates are for the school year 1987-88. They use the need analysis guidelines contained in Section 406 of P.L. 99-498 and the tax law for 1986 income. They assume a borrowing level of $1,000, that both parents work, and that the age of the oldest parent is forty-five. In the extreme case, the family is assumed to have medical expenses that exceed 5 percent of the family's income by $5,000. Educational costs are assumed to be $4,000 for the average public institution, $10,000 for the average private institution, and $19,000 for the high-cost institution.

[7] A student is considered independent if he or she will be at least twenty-four years old in the year of application or if the student was not claimed as a dependent on a parent's (or guardian's) income tax return for the previous two years and had an income of at least $4,000 during each of those two years.

Like GSLs, these programs have annual and cumulative borrowing limits.[8] But unlike GSLs, they require no financial need test and do not postpone payments until after the student has left school. Payments of at least the interest costs must begin within sixty days of the issuance of the loan, although principal repayments can be deferred for causes similar to those allowed by the GSL program.

The interest rate the bank can charge the borrower under the PLUS and SLS programs is the lesser of 3.25 percentage points above the bond equivalent of the one-year T-bill rate or 12 percent. It is recalculated each year. If the one-year T-bill rate plus 3.25 percent exceeds 12 percent, the government gives the banks a special allowance equal to the excess. When the rate is less than 12 percent, the subsidy in these programs consists only of the cost of the federal guarantee against the death, disability, or default of the borrower, and the government administrative expenses.

Perkins loans (formerly the National Direct Student Loan program) are a fourth source of federally subsidized student loans. These loans are provided from pools of capital that the federal government has provided to individual institutions. In theory, borrowers must meet more stringent needs standards than those established for the GSL program, but in practice educational institutions have a good deal of latitude in determining which students obtain these loans. The current interest charged on these loans is only 5 percent. Loan limits, grace periods, and deferral periods are similar to those in the GSL program.[9] Repayments are used to replenish the institutionally based pool of capital from which the loans were originally made. In addition, the federal government adds to the capital in these revolving funds each year and reimburses schools for loans that were canceled because the borrowers were employed in certain public service occupations.

With this background, the admitted, potential, and imagined shortcomings of the current federal approach to student loans can be examined. Note that many of the criticisms summarized here have been leveled primarily against the GSL program, which provides the bulk of the loan assistance.

Budgetary Concerns. Over the past twenty years, student loan programs have come to be a noticeable component of the federal budget. In FY 1987, $2.5 billion — roughly 0.3 percent of the federal budget — was devoted to student loans. This sum is larger than the outlays of the entire Department of Commerce.

The spending on student loan programs is also quite volatile. For example, program costs fell from $3.3 billion to $2.5 billion between FY 1986 and FY 1987.

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[8] The annual and cumulative loan limits are $4,000 and $20,000, respectively, under these programs.

[9] The total amount a student can borrow under the Perkins loan program may not exceed $4,500 for the first two years of undergraduate education, $9,000 in the third or fourth years, and $18,000 for graduate studies.

GSL program costs are unstable because the special allowance payments made to banks fluctuate with short-term federal borrowing rates.[10] An interest rate increase of 100 basis points (one percentage point) pushes up federal program costs by close to $0.5 billion; in a few years, this number will double.[11]

As long as the costs of the loan programs are significant and volatile and the federal budget deficit is large, there will be pressure to scale these programs back. The Reagan administration called for reductions in the GSL program in each of its budget proposals. Although Congress generally rejected major retrenchments, it has made some minor cost-saving modifications in the programs over the past few years. While the loan programs have been spared deep cuts, budget pressures have made Congress reluctant to adjust program parameters to reflect rising educational costs. From school years 1972-73 through 1986-87, the maximum loan limits under the GSL program were frozen at $2,500 per year, yet the average cost of college rose by over 165 percent.[12]

It is clear from the experience of the past two decades that budgetary pressures can introduce an undesirable degree of uncertainty into student aid policy. Like retirement and housing policies, student loan policies should have a degree of stability. Families cannot plan sensibly for their children's education if loan options are constantly changing. Students cannot make judicious decisions about which colleges they can afford to attend if loan requirements change when they are partway through their educational programs.

Equity Concerns. At the most basic level, some critics have questioned whether it is equitable to provide subsidies for higher education. That is, they have questioned the fairness of asking the average taxpayer, who has only a high school degree, to contribute to the higher education of the nation's future elite. Fewer than half of the nation's youth go to college. Those that do reap rewards in the form of higher lifetime earnings and more prestigious jobs.[13] Critics thus argue that public policy should treat higher education as it treats other private investments from which participants gain personal benefits. Although critics allow that imperfections in capital markets may necessitate government intervention to ensure that students have access to the resources they need to make these investments, they argue that subsidies are not justified.

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[10] The same will be true for the PLUS and SLS programs if interest rates rise above 12 percent.

[11] Congressional Budget Office, unpublished estimates.

[12] The limits were raised in the Higher Education Amendment of 1986 to the levels mentioned in footnotes 5 and 8.

[13] The average graduate with no more education than a B.A. degree who was between the ages of thirty-five and forty-four in 1984 had monthly earnings of $1,989, while the average person of the same age who had no more than a high school diploma had earnings of $1,084. Bureau of the Census, *What's It Worth: Educational Background and Economic Status: Spring 1984*, Series P-70, No. 11 (Washington, D.C.: U.S. Government Printing Office, 1987).

Of course, many have pointed out that subsidized loans are a means both of increasing access to higher education and of equalizing educational opportunity. Certainly, the nation benefits from a more highly educated citizenry, and society gains when economic opportunity is more equally shared across income classes. These rationales may justify some form of public support for higher education, but a number of studies have concluded that the current system of subsidized student loans is a rather inefficient mechanism both to increase enrollment rates and to encourage college attendance by those from lower-income families.[14]

A related criticism of the existing system is whether it is possible to determine in a fair, effective, and simple manner which students should receive subsidies. The current mechanism for determining the expected family contribution—the needs analysis—is extremely complex and intrusive and yet falls far short of ideal.[15] One source of inequity is the short accounting period used for determining eligibility. The needs analysis examines only the family's or independent student's financial situation for the most recent year. Yet, there is general agreement that a college education represents an investment that is too expensive to pay for out of current income and that yields a lifetime of dividends. Therefore, it would be more relevant to examine the borrower's financial situation over a five- or ten-year period or to look at the earnings the borrower could expect after graduation.

The need analysis system contains a number of inequities and perverse incentives. The family that profligately has spent its income is treated more favorably than the family that prudently has saved a bit each year for its child's education. The family in which both parents work is at a slight disadvantage relative to the family in which only one parent is in the labor force.[16] The family that need not save for retirement because it will benefit from a generous employer-sponsored pension system is favored over the family that has to accumulate assets because it is not covered by an employer-provided pension plan.

The changes that are occurring in family structure—rising rates of separation, divorce, remarriage, and out-of-wedlock births—will make it increasingly difficult to render fair judgments on the appropriate levels of parental contributions. Over half of the children born in 1980 will not be living with both of their biological parents by the time they reach college age.[17] Some will have noncustodial parents who are perfectly willing and able to contribute to their educations but are not expected to do so under existing regulations. Others will have noncustodial parents who may be able but are unwilling. Similar problems arise with stepparents, many of whom may not be financially responsible for the student. Although federal regulations presume that stepparents are willing to help with the educational expenses of their stepchildren, some may be paying for the education of children from a previous marriage and thus may be unable to contribute further. Yet another complexity is introduced by the growing financial security enjoyed by the elderly. Increasing numbers of grandparents may be both willing and able to help finance their grandchildren's educations.[18]

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[14] See Barry P. Bosworth, Andrew S. Carron, and Elisabeth H. Rhyne, *The Economics of Federal Credit Programs* (Washington, D.C.: Brookings Institution, 1987), chapter 6. Some analysts have concluded that the loan programs have had little effect on enrollment rates but have significantly influenced the type (public versus private, expensive versus inexpensive) of institutions students attend.

[15] The need analysis requires detailed information on a family's earnings, transfer income, assets, home equity, car loans and other indebtedness, number of family members, medical expenses, and other educational expenditures. Many of these are virtually impossible to verify, although the analysis does require copies of the family's income tax returns.

[16] Families with two earners are allowed a modest additional deduction. Under the procedures instituted by P.L. 99-498, this deduction is equal to 35 percent of the earnings of the parent with the lower earnings up to a maximum deduction of $2,130.

More intricate forms and detailed presumptive standards could be devised to deal with these situations, but they would necessarily be both excessively complex and intrusive. In the end, it may be impossible to design a truly equitable mechanism for determining the amount a family should be expected to contribute to its child's education. It may be equally difficult to design a test that can fairly determine whether a student is truly financially independent.

A final concern about the equity of the existing loan system is that it may not always target its largest subsidies on those most in need. Eligible students can borrow any amount up to the difference between the cost of attendance and the expected family contribution as long as the amount does not exceed the program's limits.[19] Students eligible for the maximum loan will receive subsidies whose sizes depend on how much they borrow and on how long they are enrolled in school, not on their relative needs. Among eligible students, those who attend the more expensive, higher-quality institutions tend to borrow more money and to stay in school longer. Therefore, they generally receive the greatest benefits. Of those receiving GSLs, students at higher-priced schools also tend to come from the families with the greatest resources and to be the borrowers who are most likely to have the highest lifetime earnings.

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[17] Using a synthetic cohort analysis, one researcher has estimated that 94 percent of the blacks and 70 percent of the whites born in 1980 will spend some time in a single-parent family before they reach their eighteenth birthday. See Sandra Hofferth, "Updating Children's Lifecourse," *Journal of Marriage and the Family* 47 (February 1985), pp. 93-115. In 1981, 32.5 percent of children of all ages were not living with both biological parents. See Suzanne M. Bianchi and Judith A. Seltzer, "Life Without Father," *American Demographics* 8 (December 18, 1986).

[18] For an analysis of the improved income and wealth position of the elderly, see Bruce Jacobs, "The Elderly: How Do They Fare?" Paper presented to the Institute for Family Studies (Marquette University) and American Enterprise Institute Working Seminar on the Family and American Welfare Policy, October 1986.

[19] The cost of attendance includes tuition, fees, supplies, books, transportation, room, and board.

Behavioral Concerns. In recent years, concern has developed over the possibility that the current student loan system may be influencing the behavior of borrowers in undesirable ways. These influences could arise from increased levels of student indebtedness and the large monthly loan payments that are necessitated by the limited repayment period of the current loan programs. There is little but circumstantial and anecdotal evidence to support these fears. The data needed to examine the issue in a rigorous fashion are not available.

One possible behavioral effect of current programs is that those students who now depend heavily on loans to finance their educations may look on college, to an undesirable degree, as vocational training. The broader liberal arts experience that educators have valued so highly may be sacrificed by these borrowers. Such students may be choosing their courses more because they anticipate that these courses will increase their future job prospects than because they are intellectually drawn to the subject matter. Indebtedness and loan limits may also discourage some students from seeking graduate educations and may force others to interrupt their schooling in order to reduce their debt burden even though it would be more efficient to go directly on to graduate school.

Large debt burdens also may be unduly affecting the postschool lifestyles of students with large loans. First jobs and career decisions may be dictated more by the need to pay off loans than by more sensible long-run considerations. Students with significant loan burdens may be driven into occupations with high starting pay and may shy away from socially useful jobs that tend to be less remunerative. For example, they may feel less able to take positions in the nonprofit and public sectors.

It is possible that the burden imposed by student loans could also affect other dimensions of the lives of young indebted adults who are just leaving school. Those who have only recently finished their educations tend to have unstable incomes and significant expenses. Often they are setting up their first households and buying furniture, housewares, and cars. Some face the costs of relocation. The added burden of significant student loan repayments may make them less willing and able to marry, have children, or buy homes.

Whether or not the current student loan programs are having such repercussions remains largely a matter of conjecture. If further analysis reveals that these effects are significant, and if they are regarded as undesirable, the remedy would be to reduce the burden that loans are placing on such students.[20] This could be accomplished either by increasing the subsidy or by easing repayment terms. The former would only aggravate the budgetary and equity concerns discussed above. The latter could be achieved by lengthening loan repayment periods or by gradually increasing repayments as the borrower's earning power rises.[21]

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[20] A case could be made that many of these responses are not undesirable. For example, to the extent that we want to treat education as an individual—as opposed to social—investment, students should weigh the market payoff expected from their courses and majors.

Administrative Concerns. The current student loan system is complex as well as difficult and costly to administer. In part, these problems stem from the nature of the loans; in part, they stem from the diversity and lack of coordination of the various programs.

Student loans are issued in relatively small magnitudes. Eligibility determination is complex and expensive, largely because it is difficult to collect and verify information on the borrower's family financial situation. In response to this situation, large student loan bureaucracies have developed on campuses, in the government, in the guarantee agencies, and in the private need-analysis industry. At times, policy has appeared to be driven more by the need to defend the interests of these bureaucracies than by the need to assist students.

Once issued, student loans are difficult and expensive to service. They are unsecured and are held by borrowers who are highly mobile and may have quite unstable incomes during the first few years of repayment. Many borrowers fall behind in their payments. The default rate is relatively high.[22] Current programs provide few incentives for banks to pursue collections aggressively. It is often more profitable to declare a loan in default and turn it over to the government agency for the guarantee.

The current loan system is also complex and confusing for potential borrowers. Families and students are faced with a number of different loan programs, each with slightly different eligibility requirements, loan limits, and terms. Different institutions provide the various loans, and there is often little coordination among the various lenders. Numerous forms must be filled out, verification of documents may be required, and exit interviews must be endured. Often borrowers must repay loans to several institutions.

From an administrative standpoint, the existing student loan system may not be susceptible to much improvement as long as its current structure is left unchanged. In other words, significant administrative simplification and cost savings may only be possible if a different approach is adopted.

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[21] Recent legislative changes have provided some options along these lines. Students with several loans totaling at least $5,000 can consolidate them into a single loan with a repayment period of between ten and twenty-five years. This new loan would have an interest rate of at least 9 percent. In addition, the interest rate on new GSLs is lower during the first four years of repayment than during the later years.

[22] In 1986, the default rate for GSLs was 7.6 percent. For various measures of default rates see *Budget of the United States Government: Fiscal Year 1988, Appendix* (Washington, D.C.: U.S. Government Printing Office, 1987), p. I-118, and Arthur Hauptman, *Student Loan Default Rates in Perspective* (Washington, D.C.: American Council on Education, 1983).

The extent to which the budgetary, equity, behavioral, and administrative concerns discussed above represent substantial shortcomings of the current system is open to debate. Even if these concerns do constitute real shortcomings, they may not be sufficient to warrant a fundamental restructuring of the current approach. But if they are grounds for considering alternative approaches, the proposal that follows is an attempt to meet them. It provides a method of eliminating the taxpayers' subsidy for student loans, of spreading eligibility to all students, of reducing the annual loan repayment burden that could be affecting student behavior, and of simplifying the loan system's administrative structure.

The Higher Education Loan Program (HELP): A Social Insurance Approach

The HELP proposal applies the social insurance approach to student loan policy.[23] Under this plan, student loans would come to resemble social security benefits or unemployment compensation in several respects. First, student loans would be an entitlement drawn from a dedicated trust fund. Second, all who benefited from this entitlement would be required to make small, continuing contributions to support the trust fund. Third, the size of the contributions would vary with the participant's earnings and with the size of the benefit the participant received. Fourth, although some redistribution would take place among the program's participants, the trust fund would be self-supporting; it would not require subsidies from nonparticipants. In one respect, HELP would be different from existing social insurance programs. HELP benefits would precede contributions rather than follow them, as is the practice in social security and unemployment compensation.

Under the HELP program, any student in good standing and enrolled more than half-time at an accredited institution of higher education would be able to borrow from the trust fund. The loan arrangement would be solely between the student and the fund. The student's family circumstances would be irrelevant, and borrowers would not have to meet a needs test. Because of the nature of the repayment system, the participant would need to furnish only a minimal amount of information to complete the application process.[24]

Students who borrowed from the trust fund would repay their loans through the existing FICA payroll tax system.[25] Each borrower's payroll tax rate would be increased by an amount that would vary according to the size of the loan the individual received from the trust fund. The increased tax rate would apply only to the employee, not to the employer, portion of the payroll tax. If this were not the case, employers might shun those with student loans. The tax rate, or uniform loan repayment rate, would be set so that each cohort of borrowers would repay the trust fund for the full costs of its loans. The rate needed to achieve this objective would be quite low; about 0.24 percent per $1,000 borrowed would be sufficient (see Appendix, page 52). In other words, a 1-percent payroll tax would be sufficient to repay a $4,000 loan, and a 3-percent tax would suffice for a loan of $12,000.

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[23] This proposal is not a substitute for the various grant programs.

[24] HELP would have to know only the borrower's social security number and that the borrower was enrolled in good standing at a qualifying institution. HELP would not even have to know the borrower's address.

[25] Although HELP would use the existing social security tax system as its collection mechanism, it

The amount that could be borrowed per percentage point of HELP payroll tax could be indexed to keep pace with the rising cost of education without threatening the financial integrity of the trust fund. This is possible because the average earnings of each new cohort of borrowers will be higher than those of the previous cohort. Thus, a constant tax rate will generate a higher stream of repayments, a stream capable of supporting a loan that is commensurately larger. It is also worth noting that increases in nominal interest rates should not affect the financial integrity of the trust fund. This is true because such fluctuations tend to reflect changes in the rate of inflation, which will generally be reflected in higher nominal wages and increased payments to the trust fund.

Low tax rates are possible under the HELP approach because the burden of repaying student loans would be stretched out over the borrower's full working life. Repayments would start immediately in that the new payroll tax rate would be applied to wages that borrowers earned from part-time or summer jobs while they were in school. Payments would continue to be deducted whenever and wherever the borrower worked.

Relative to the annual repayment obligations imposed by current loan programs, those associated with HELP would be small and proportional to the borrower's earnings. Therefore, it is unlikely that repayments would represent a burden that would adversely affect the behavior of the borrowers. Those who had no earnings because they were unemployed or were caring for children obviously would not be repaying the trust fund. Borrowers who chose to work in low-paying occupations would pay proportionately less than those who chose high-paying jobs.

A certain amount of redistribution would occur among borrowers because, per dollar borrowed, the amount repaid by each borrower would be proportional to that individual's lifetime earnings. Those who became disabled, experienced significant periods of unemployment, worked in low-wage jobs, or held part-time jobs might never pay taxes sufficient to cover the full cost of their

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would not be a part of the social security system. The Treasury Department, which collects FICA taxes, would remit the HELP receipts to the HELP trust fund.

individual loans. At the other extreme, borrowers who worked continuously in high-wage jobs would contribute more than enough to cover the costs of their loans.

Some degree of redistribution might be justified. It can be argued that those with higher earnings benefit more from their loans than do those with lower earnings. However, the degree of redistribution would be limited by the earnings maximum in the FICA system.[26] This would ensure that students who expected to earn very high wages would not be severely penalized and therefore dissuaded from participating in the program.

The HELP program would simplify the student loan system greatly and would reduce administrative costs. A single program administered by a single agency could replace the four existing federal programs and the myriad public, private, and nonprofit institutions now responsible for administering and guaranteeing loans. The complex financial need analysis system could be swept aside for loan recipients. There would be no need for guarantee agencies. Defaults and repayment arrears would become a thing of the past because the correct level of payments would be withheld from the borrowers' earnings automatically. Moreover, because repayments would be made through the FICA system, the geographic mobility of borrowers would be of no concern.

In most respects, HELP is simply a variant of an idea—the income-contingent loan (ICL) — proposed many years ago by Milton Friedman.[27] The idea was revived in the late 1960s, when a federal advisory panel recommended the creation of an Educational Opportunity Bank (EOB) to provide student loans that would be repaid through income-contingent payments.[28] Yale University experimented briefly with ICLs during the 1970s. In the mid-1980s, interest in income-contingent approaches began to reemerge as the inadequacies of the existing loan programs became more apparent. A number of schools have developed special loan repayment terms for their low-income graduates.[29] In addition, the Higher Education Amendments of 1986 (P.L. 99-498) authorized a $5-million ICL pilot project, and the Reagan administration proposed an ICL plan in its FY 1988 budget.

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[26] In 1988, FICA taxes will be paid on all covered earnings up to $45,000. The taxable earnings maximum is automatically increased each year by the percentage by which average wages in the economy grow.

[27] See Milton Friedman, *Capitalism and Freedom* (Chicago: University of Chicago Press, 1962), chapter 6.

[28] This was known as the Zacharias plan after the chair of the panel, Professor Jerrold Zacharias of MIT. See *Educational Opportunity Bank: A Report of the Panel on Education Innovation to the U.S. Commissioner of Education, Director of the National Science Foundation, and Special Assistant to the President for Science and Technology* (Washington, D.C.: U.S. Government Printing Office, August 1967). A more recent variant of this approach was proposed by John Silber, president of Boston University, in "The Tuition Dilemma: A New Way to Pay the Bills," *The Atlantic* 242 (July 1978).

[29] Harvard Law School has established a program under which the school will assume all education loan payments for graduates earning below $20,000. Graduates earning below $29,000 will have their payments limited to 6 percent of their incomes. The Kennedy School at Harvard has established

Despite the intellectual appeal of ICLs, they have met with little acceptance among policymakers. One major reason for this is that the ICL proposals entail all of the administrative problems of the current loan programs and then some. In particular, the repayment process is horrendously complex. Lenders must define what is to be regarded as the borrower's income. Does it include a spouse's income? The income of a dependent child? Income from assets? An assumed return on assets that yield no current income? Once these thorny issues have been resolved, the lender must develop mechanisms for periodically determining and verifying the borrower's income and for collecting the payments. It would be extremely difficult for colleges or banks to do this efficiently. For this reason, a number of the ICL proposals have suggested that the federal income tax system could perform these functions through the IRS. But federal policymakers thus far have assiduously rejected efforts to transform the IRS into a bill collection agency. In addition, this approach might be complicated by the fact that federal taxpayers can choose among several different filing statuses.

HELP's social insurance approach would resolve a number of the administrative difficulties inherent in the ICL plans because HELP would not rely on the income tax system or a school-based system but rather would depend on the definitions, practices, and enforcement mechanisms established for the social security system. Thus, there would be no ambiguity about what would constitute the borrower's income; it would be the individual's earnings up to the FICA taxable maximum. There would be no need to verify the borrower's income. The system would not be perturbed by the mobility and fluctuating incomes of borrowers. Through FICA, repayments would always be automatically withheld, and, therefore, they would be on time and in the correct amount. The integrity of the IRS would not be compromised.

Until recently, the approach used by the HELP proposal would not have been workable for two reasons. First, a small but significant fraction of the nation's work force was not covered by the social security system. This is no longer the case, however, because recent legislation extended Old Age, Survivors, and Disability Insurance (OASDI) or Health Insurance (HI) taxes to all federal employees and to all new state and local government workers, thus making the FICA system virtually universal among young workers. Second, in the past there

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a program to forgive the loan payments of graduates earning below $15,000. Those in public service jobs that pay less than $30,000 per year will have their loan payments limited to 10 percent of their incomes. Yale's School of Management will defer loan payments for those choosing public sector careers with salaries below roughly $25,000. See *Washington Post*, February 21, 1987, and *New York Times*, March 4, 1987, and March 18, 1987.

was a significant difference between the labor-force participation of men and women. Such a differential would provide to the average female borrower an unreasonably large subsidy in an earnings-contingent repayment system. But in the past several decades, the rise in the labor-force participation rate of educated women and the movement of women into higher-paying occupations have reduced the level of intergender subsidy that would result from a program such as HELP.[30]

Implementation Issues and Some Further Questions

The preceding description of HELP sheds little light on a number of important questions. Without further analysis, it is difficult to judge whether HELP represents a realistic alternative to the current student loan system or a radical proposal that would prove unworkable. Thus, it is vital to examine the details of certain dimensions of the plan and to discuss some of the issues that would arise if it were implemented.

One obvious concern is the capitalization of the trust fund. In the initial years, the amount needed would be substantial. Although HELP payroll tax payments would start to flow into the trust fund almost immediately, these receipts would require years to grow to a significant size. If the total amount lent in the first year was $10 billion and the average volume of new loans issued each year grew at the same rate as average wages, the negative balance of the trust fund would exceed $300 billion within fifteen years. In nominal terms, this negative balance would continue to grow forever, as HELP continued to loan out more money each year. But in real terms, this balance would stabilize after forty years at about $280 billion.[31]

Some source of capital would be required to provide the loans, especially during the program's first few decades. Private capital markets are a possible source. The introduction of HELP would mean that private capital markets would not be lending the roughly $9 billion that students currently borrow through the federal student loan programs. Still, the capital needs of HELP would be far greater than those of the discontinued programs because HELP's average repayment period is so much longer. In addition, it would be prudent to expect that borrowing would increase under HELP, possibly by a significant amount.

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[30] The labor-force participation rates for men and women ages twenty-five to twenty-nine with four or more years of college were 93.8 and 64.0 percent in 1970 and 92.1 and 86.1 percent in 1987. The degree of intergender subsidy provided by a uniform repayment rate of 0.24 percent per $1,000 borrowed can be determined by examining the rates that would be required to balance funds that included only male and only female borrowers. The male rate would be 0.19 percent, and the female rate would be 0.32 percent. This difference is undoubtedly overstated because the estimates contain no adjustment for future reductions in the gap between male and female average earnings.

[31] See Appendix. Slight changes in the tax rate could be used to build up a surplus in the trust fund. For example, a tax rate of 0.32 percent per $1,000 borrowed would put the trust fund in surplus after roughly sixty years. At this point, the tax rate could be lowered to maintain the trust fund with neither a positive or negative balance. The balance in the trust fund is quite sensitive to the difference between the rate of growth of the average borrower's earnings and the rate of growth of the aggregate amount of loans made each year. For example, if average earnings grew by 6 percent a year and the amount loaned out grew by 5 percent a year, the nominal balance in the trust fund would be positive after fifty-one years using a tax rate of 0.24 percent per $1,000 borrowed.

The surpluses accumulating in the social security trust funds represent another possible source of initial capital for HELP. These surpluses, which have begun to grow at a rapid pace, are being generated by the payroll tax increases that were enacted as part of the 1983 social security reforms. In FY 1987 the OASDI trust funds took in $20 billion more than they paid out in benefits; by 1993 these annual surpluses will have grown to $97 billion.[32]

The balances being built up in the OASDI trust funds are intended to pay for the retirement benefits of the baby boom generation. To effectively accomplish this objective, the surpluses should represent net additions to national savings and should be invested in ways that expand the nation's productive capacity or wealth. Many analysts suspect, however, that legislators will be tempted to use these growing surpluses to support current government consumption and lower income tax rates. In other words, the mounting surpluses in the social security system will be used to mask the true magnitude of the imbalance between spending and revenues in the non-social-security budget and thereby will sap the drive to raise taxes and cut spending. Redirecting the social security surpluses into educational loans could be both economically sound and politically popular. It could spur policymakers to do more to reduce the federal budget deficit. It would benefit generations of students. And it could increase national savings. Private capital markets would be free to take the money that was lent to students under GSL and redirect it to private investments.

The HELP trust fund would pay the social security system the same interest social security would have received had it continued to buy federal debt instruments. As the social security system needed its capital back to pay benefits to the retiring baby boom generation, the HELP trust fund could be refinanced. In addition, the government outlays on current subsidized student loan programs would be phased out as the balances on the outstanding loans were paid off. Eventually, this would reduce the federal deficit and, therefore, federal borrowing requirements, by about $3.5 billion.[33]

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[32] Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1989-1993* (Washington, D.C.: U.S. Government Printing Office, February 1988).

[33] The HELP program would have to be off-budget, just as is the case with social security. If this were not the case, the increase in the negative balance of the HELP trust fund, under existing government accounting standards, would add to the federal deficit each year even though the program was self-financing.

A second dimension of the HELP approach that deserves more attention is its administration. Would HELP really be relatively easy to administer? Some may doubt that such a program could be run through the FICA payroll tax system. There are many implementation questions that would have to be answered. For example, if each borrower's payroll tax rate were tied to the size of that individual's loan, how would an employer find out the correct HELP tax rate to withhold for each employee? One possible approach here would be to provide each borrower with a card containing this information. But if participants "forgot" to inform their employers that they owed a HELP tax as well as an OASDI tax, such a system would have enforcement problems.[34] A better mechanism would be to adopt the technology that bank customers use to find out the current balances in their accounts. Employers could call a central computer, enter the new employee's social security number, and be informed by the computer of the individual's HELP tax rate.

A third aspect of the HELP approach that some may find troublesome is that it apparently reduces the assistance or subsidy to low-income students. This reduction seems large when one considers the size of the subsidy that would be taken away, but it may be more relevant to compare the out-of-pocket burdens that GSL and HELP would impose on students and recent graduates. Under GSL, students receive a loan and make no immediate out-of-pocket payments; under HELP, students obtain the loan but must pay a small tax on their summer and in-school earnings. But recent graduates under GSL may have repayments that represent a significant portion of their earnings, whereas those under HELP would pay only small, fixed fractions of their incomes.

The important policy question is whether loans such as GSLs that are highly subsidized but that require fixed repayments over a short period deter college attendance by low-income youth more than unsubsidized loans such as HELP that require smaller, earnings-related repayments over a lifetime. If the HELP approach were found to discourage low-income youth from attending college, this effect could be ameliorated by devoting some of the budget savings gained from terminating the subsidized student loan programs to expanding targeted grant programs.[35]

A fourth area that deserves some elaboration is the flexibility that the social insurance approach affords. The parameters of HELP can be modified to shift the emphasis of the program. For example, if the degree of redistribution among borrowers were thought to be excessive, the maximum earnings on which HELP taxes would be applied could be set at a lower level than that established for the social security system. If this were done, there would be less subsidization of low-earning borrowers by high-earning borrowers, less subsidization of women borrowers by men, and less subsidization of borrowers who attended college for only a few years by those who completed their degrees. Of course, any decrease in the earnings maximum would require a higher tax rate.[36]

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[34] This would pose few difficulties in cases in which the borrower worked for an extended period for the same employer. When the incorrect amount was remitted to the social security system, a notice of arrears stating the correct tax rate could be sent to the employer. In addition, penalties could be assessed to discourage "absentmindedness." It would be harder to ensure that the correct amount was withheld from the pay of borrowers who worked for employers for short periods.

[35] The HELP program is not intended as a substitute for Pell grants, College Work Study (CWS), Supplemental Educational Opportunity Grants (SEOG), or state Student Incentive Grants.

The program also could be modified to reduce the degree of redistribution among the borrowers by tailoring the tax rates to the expected future income of the borrowers. We know that those who complete college have significantly higher lifetime earnings than do those who do not. Those who attend graduate school have even higher earnings. If the tax rate was designed to vary by the educational attainment of the borrower, those who attended college but did not graduate would pay 0.29 percent of their earnings per $1,000 borrowed, those with bachelor's degrees would pay 0.22 percent, and those with graduate training would pay 0.20 percent.

Another program parameter that could be altered is the repayment period. Some may object to stretching out repayments over the borrower's entire working life. An option would be to end the HELP tax at the normal retirement age so as not to discourage labor-force participation by the elderly.[37] Another option would be to limit the repayment period to twenty or twenty-five years. Changes of this sort would also require higher tax rates.

The HELP approach also could be individualized to a greater degree. Individual borrowers could have their HELP tax liability canceled if their repayments exceeded a certain multiple of their loan.[38] Also, individuals could be offered the option of buying their way out of their HELP obligation. That is, participants' HELP taxes could be eliminated if they made a sufficiently large contribution to the trust fund. Although such modifications need not entail higher tax rates, they would begin to erode the social insurance nature of the program.

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[36] The increase in the tax rate would be less than proportional to the reduction in the earnings maximum because few borrowers have earnings near the maximum. For example, a 24-percent reduction in the maximum would require an increase of only 0.02 percentage points (to 0.26 percent) in the tax rate per $1,000 borrowed. Under this simulation, the maximum earnings subject to the HELP tax was reduced from $39,600, which was the maximum earnings subject to FICA tax in 1985, the year for which the estimates were made, to $30,000. However, the ratio of the payments required of a borrower of $1,000 with earnings of $40,000 to those of a borrower with earnings of $20,000 would be reduced from 1.98:1 to 1.5:1 by such a change.

[37] This assumption was incorporated in the estimates presented in this essay.

[38] The calculation would have to be made in terms of discounted dollars to take into account the temporal pattern of the repayments.

A final program parameter worth discussing is the public subsidy. The HELP proposal, as described, establishes a tax rate that is sufficiently high to ensure that the general taxpayer does not subsidize loans for college. Many people feel, however, that the federal government should provide some subsidy to encourage students to invest in higher education because of the social benefits that accrue from having a more educated citizenry and labor force. Such a subsidy would be provided if the HELP tax rate were reduced to a level below that needed to balance the trust fund's accounts. The difference could be made up by a payment from general revenues, just as is currently done for Part B of Medicare.

Rather than spreading the public subsidy across all borrowers, it could be targeted to achieve some objective. For example, the subsidy could be used to ensure that borrowers with high lifetime earnings did not shun the program. This could be accomplished by capping the total repayment that any individual would be expected to make.

If one were concerned about suddenly shifting from a highly subsidized system to an unsubsidized one, the tax rate could be set at a level that would imply the same aggregate amount of subsidization as the current system. The amount of borrowing that this tax rate schedule could support could be frozen in nominal terms. For example, the tax could be set at 0.20 percent per $1,000 of nominal borrowing. The subsidy would gradually disappear as the average lifetime earnings of each cohort of new borrowers rose. Once the subsidy disappeared, the $1,000 could be indexed.

Conclusions

The proposal described here clearly represents only a first cut at a new approach to student loans. A good deal of further analysis is needed to determine whether an approach such as HELP really represents a viable alternative to the current loan programs. This work should examine a number of questions, prime among them whether students with high as well as low earning potential would find the HELP approach attractive. Although many high-earning-potential students would have to rely on whatever loan program the government established, some who did not like the redistributive aspect of HELP might be able to draw on increased parental support through mechanisms such as home equity loans. If this led to disproportionate participation by those who expected to have relatively low future earnings, higher HELP tax rates would be required. It is possible that even with a reduced maximum level for earnings subjected to HELP taxes, the tax rates might have to be set at levels that society would regard as too high.

A second question of some importance is whether the official sanctioning of a national program such as HELP would lead parents to reduce their financial support for their children's educations. Because HELP could be interpreted as a sign that society believes that students should bear an increased share of the burden of their education, parents might feel less social pressure to forgo a Caribbean vacation so that Junior can go to college. Some behavioral response along these lines is inevitable and, in fact, occurs in response to the current student assistance programs. The relevant question is how much of such behavior society should facilitate.[39] Of course, under HELP, parents still should have a strong motivation to save and contribute to their children's educations because doing so would raise their children's after-tax incomes.

A third important question is whether HELP would touch off an undesirable borrowing binge by students. Would students borrow largely to improve their lifestyles rather than to finance their educations? The burdens imposed by a program such as HELP might appear to students as so small and so distant that many would choose to borrow up to the program's limits to have a slightly larger apartment or a bit better car. Objectively, of course, there may be nothing wrong with an unsubsidized loan program that allows individuals to spread consumption more evenly over their lives. But society probably would not regard this as a valid reason for a publicly administered program or as an appropriate use of scarce capital. Moreover, according to prevailing values, students are expected to struggle and sacrifice to get by. Thus, people may question why students should be given the opportunity to finance their consumption under better terms than the average American who must resort to a bank or consumer credit loan. In addition, people may feel that college students, having just left home, are too immature or inexperienced to make wise decisions about allocating their lifetime consumption. Young students might unrealistically attempt to maintain the standards of living they enjoyed in their parents' homes. If this proves to be the case, counseling and parental consent could be added to the requirements to obtain a HELP loan.

A fourth question that should be examined is whether the higher payroll tax rates associated with HELP would significantly reduce the labor supply of borrowers. In recent years, income tax rates have been greatly reduced, in part, out of concern over the work disincentives that high marginal tax rates might have created. At the same time, the payroll tax rate has been increased to help build surpluses in the OASDI and HI trust funds and to cover soaring Medicare costs. If the demands of the social security and Medicare systems continue to push up payroll taxes and a HELP tax is added on, the burden may become high enough to affect the labor supply of the college educated.[40] This possibility could be reduced by lowering the maximum amount of earnings subjected to the tax. If this threshold were set below the level of earnings of the average borrower, the marginal tax rate faced by participants would not be affected by HELP.[41]

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[39] The responsibility that parents have for their children reflects societal values that change over time. These norms are reinforced by public policy. In most respects, the age of majority or the age at which parents are no longer held responsible for the actions or upkeep of their children is eighteen. The expectation that parents should help finance the educations of their adult children is an exception to this.

A final question concerns loan policies for noncollegiate postsecondary students. This HELP proposal is directed at undergraduate and graduate students. If vocational and trade school students were included as well, the degree of cross-subsidization could be large enough to make the program unworkable. The reason is that the lifetime earnings of noncollegiate borrowers is sufficiently low that it would push the tax rate up to a fairly high level. Large subsidies then would flow from borrowers who earned bachelor's or graduate degrees to those who participated in vocational and technical programs. The former would shun the program as a result.

Several solutions to this problem have already been discussed. The first is to vary the HELP tax rates according to the level of the borrower's educational attainment. If properly designed, such a system could even provide an incentive for students to complete their programs and degrees. The second solution would be to set the maximum amount of earnings that would be subject to the HELP tax at a fairly low level. A third option is to design a separate program for noncollegiate students. When all is said and done, however, it is probable that no single program can be expected to effectively and efficiently meet the needs of students in both three-month cosmetology courses and three-year law school programs.

Appendix

This appendix describes the data source and methodology used to estimate the HELP tax rates and trust fund balances reported in the text. These estimates should be regarded as preliminary; more sophisticated techniques are available that could lead to more refined estimates. It should be noted that the estimates are quite sensitive to small changes in the assumptions used and in the parameters selected for the simulations.

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[40] By international standards, this burden would not be exceptional. Under the extreme example of the student who borrowed the $54,750 maximum permitted under the GSL program for undergraduate and graduate school combined, the HELP tax rate would be 13.6875 percent. If this were added to the post-1990 social security tax rate on employees of 7.65 percent, the total burden would be 21.3375 percent. The 1985 employee payroll tax rate in Sweden was 36.0 percent; in the Netherlands, it was 21.6 percent; in Germany, it was between 18.7 and 20.7 percent; and in France, it was about 15 percent.

[41] It should be noted that the HELP program would not encourage employers to substitute capital for educated labor because the employer tax rates would be unaffected by the program.

The estimates of the HELP tax rates required to balance the trust fund refer to a cohort of college students who would have borrowed in 1985. These estimates were calculated using the March 1986 Current Population Survey (CPS) data tape. This tape contains earnings and labor-force participation information for 1985.

A number of simplifying assumptions were made to generate the estimates. The major ones were as follows:

1. That HELP borrowers would have an income distribution that was similar to that of the 1986 population who had attended at least one year of college. If those who earned relatively high incomes shunned the program, this assumption would cause the estimates to be too low.
2. That the age-earnings profile of the average HELP borrower would be similar to the age-earnings profile of the cross-section of college-educated individuals on the CPS tape. In other words, the average real income of a HELP borrower when he or she was fifty years old would be the same as the average income of the college-educated person who was fifty in 1986. Productivity advances and changes in the relative supply and demand for college-educated manpower could render this assumption too optimistic or too pessimistic.
3. That the amount borrowed would not be correlated with a student's future income. If students who attended expensive schools borrowed more than others under the HELP system, and if they had higher lifetime earnings, this assumption would cause the estimated tax rates to be too high. If those who borrowed the most came from less affluent families and had lower-than-average future earnings, the bias would be in the opposite direction.
4. That the amount borrowed would be proportional to the number of years the student remained in school. Possibly, those who remained in school the longest would borrow disproportionate amounts because their families' savings would be depleted as they continued in school. If this were the case, the estimated tax rates would be too high because those who remain in school tend to complete their courses of study and, as a result, have higher earnings streams. Alternatively, those who remain in school may come from more affluent families that have less need to borrow. If this is the case, the estimated tax rates could be too low.

An adjustment was made in the labor-force participation rate of women to reflect the increased participation of the younger age cohorts. The fraction of women with earnings in each age group has been rising steadily. For example, the participation rate for women who were fifty-five to fifty-nine years old in 1960 was 39.6 percent, whereas that age cohort had a participation rate of 51.0 percent in 1980. To reflect this trend, Bureau of Labor Statistics labor-force participation projections and other information were used to increase the labor-force participation rate of women on the data tape. These adjustments reflect the belief that by the time they are fifty, women who are now twenty will be working more than do women who are currently fifty.

No adjustment was made for any possible reduction in the gap between the average earnings of males and females who work. To the extent that this gap narrows, the estimates of the tax rates would be on the conservative side.

The estimates assume that the average earnings of borrowers will grow by 5 percent per year in nominal terms. The estimates also assume that the total amount of loans issued in the first year will be $10 billion and that this amount will grow by 5 percent each year. This rate of growth would encompass both increases in the number of students and increases in the average cost of college attendance.

The estimates also assume that the HELP trust fund will have to pay an interest rate of 2.75 percentage points over the inflation rate for the capital it borrows and that the administrative costs of the program will amount to 0.25 percent of the trust fund balance. Based on recent experience, the assumed interest rate is on the conservative side because the social security system earned 2.20 percent over the Consumer Price Index and 2.66 over the Personal Consumption Expenditure deflator during the 1970 to 1986 period. The administrative cost allowance is probably generous as long as the trust fund has large negative balances. However, if the system were operated to keep the trust fund in balance or in surplus, the methodology used would be inappropriate, and a figure equal to some fraction (e.g., 0.25 percent) of the outstanding loan balance would have to be subtracted from the trust fund balances.

The estimates implicitly assume that there is no growth in overall real earnings for the population as a whole.[42] In other words, whereas the twenty-five-year-old's real earnings will rise as that individual grows older — say, to the age of thirty-five — these earnings only rise to the real levels enjoyed by those who are currently thirty-five. Under this assumption, the average thirty-five-year-old person will not enjoy a higher level of real earnings in ten years than his or her thirty-five-year-old brother or sister enjoys today. This is a very pessimistic assumption, one that — with the exception of the 1973-83 period — is not supported by historical experience.

If real, age-specific earnings grew by 1 percent per year, a lower HELP tax rate could be imposed, or the trust fund would begin to run a surplus after forty to sixty years.

The HELP trust fund takes many years to mature because it does not have a full complement of borrowers in repayment status until the first cohort of borrowers reaches the age of sixty-five. This could take as long as forty-seven years.

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[42] Each age group's average earnings are increased by 5 percent each year, and the nominal interest rate plus administrative charge imposed on the outstanding trust fund balance is 8 percent.

The trust fund balances are influenced by the real interest rate charged the trust fund for its negative balances, the rate of growth by which the average borrower's earnings rise, the rate of growth of amount of loans issued each year, and the HELP tax rate. Simulations suggest that the trust fund balance is most affected by the difference between the rate of growth of new loans issued and the rate of growth of the average borrower's earnings.

Table A-1 provides the break-even tax rates for all borrowers and for borrowers broken down by sex and level of educational attainment.

Table A-2 provides estimates of the HELP trust fund balance for the first fifty years assuming a uniform tax rate of 0.25 percent of earnings per $1,000 borrowed. These estimated balances are provided in current and constant dollars. The trust fund is assumed to lend $10 billion in the first year. In each subsequent year, this amount is increased by 5 percent. The 3-percent interest rate is made up of a 2.75-percent real interest rate plus a 0.25-percent administrative fee.

Table A–1. Break-Even Tax Rates for HELP per $1,000 Borrowed

	Maximum Earnings Subject to Tax	
Cohort	*$39,000*	*$30,000*
All borrowers	0.0024	0.0026
Men	0.0019	0.0022
Women	0.0032	0.0033
Some college	0.0029	0.0030
B.A. only	0.0022	0.0024
Some graduate school	0.0020	0.0020

Note: A rate of 0.0024 is equal to 0.24 percent per $1,000.

Differential rates reflect earning potential of various groups and adjust for redistribution effect.

Table A–2. HELP Trust Fund Balance Deficit (in billions of current and constant dollars)

	Fund Balance			*Fund Balance*	
Year	*Current dollars*	*Constant dollars*	*Year*	*Current dollars*	*Constant dollars*
1	$ −10.7	$ −10.7	26	$ −830.0	$ −245.1
2	−22.6	−21.5	27	−891.4	−250.7
3	−35.8	−32.4	28	−955.4	−255.9
4	−50.3	−43.4	29	−1,021.7	−260.6
5	−66.2	−54.4	30	−1,090.5	−264.9
6	−83.5	−65.4	31	−1,161.6	−268.8
7	−102.3	−76.3	32	−1,235.1	−272.2
8	−122.6	−87.2	33	−1,310.9	−275.1
9	−144.6	−97.9	34	−1,389.0	−277.6
10	−168.2	−108.4	35	−1,469.3	−279.7
11	−193.6	−118.8	36	−1,551.7	−281.3
12	−220.8	−129.1	37	−1,636.1	−282.5
13	−249.9	−139.1	38	−1,722.5	−283.2
14	−281.0	−149.0	39	−1,810.6	−283.6
15	−314.1	−158.7	40	−1,900.4	−283.4
16	−349.4	−168.1	41	−1,991.8	−282.9
17	−386.8	−177.2	42	−2,084.9	−282.0
18	−426.6	−186.1	43	−2,179.7	−280.8
19	−468.6	−194.7	44	−2,276.5	−279.3
20	−512.9	−203.0	45	−2,375.7	−277.6
21	−559.6	−210.0	46	−2,484.3	−276.5
22	−608.8	−218.5	47	−2,599.9	−275.6
23	−660.3	−225.7	48	−2,724.2	−275.0
24	−714.4	−232.6	49	−2,858.3	−274.8
25	−770.9	−239.0	50	−3,003.3	−275.0

Note: The calculations assume that the first year loan volume is $10 billion, that the loan volume grows by 5 percent per year, that the average earnings of borrowers grow by 5 percent per year, and that the repayment rate is 0.0025 per $1,000 borrowed.

Representative **Scheuer**. Let's go on with Mr. Prestowitz. I enjoyed this book of yours, "Trading Places."

STATEMENT OF CLYDE PRESTOWITZ, SENIOR ASSOCIATE, CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE

Mr. **Prestowitz**. Thank you.

Representative **Scheuer**. It is a marvelous piece of work. How in the world did we manage to lose our preeminence as an industrial power to the Japanese?

I hope that you will be able to tell us what, if any, role you perceive our failing education system to have played. Our workers aren't as skilled or as productive as their counterparts in the Western World, all over Europe, Japan, Australia, New Zealand, and Canada; and we have a 25-percent adult illiteracy rate.

How do you factor into our loss of economic preeminence this education deficit and how do we put the pieces together again?

Mr. **Prestowitz**. I think your comments are quite right.

Let me make two comments.

It has been said that Japan has the best lower 50 percent in the world. It is interesting that we hear a great deal about Japanese education, usually at the secondary school level. We hear that they go to school for 240 days a year and they are studying on Saturdays and Sundays and the mothers are down there pushing them through, and so forth. The funny thing is, when they get to college they don't do much at all. College in Japan is really a picnic.

If you compare college graduate to college graduate, Japan and the United States, my guess is that the United States is probably superior. But of course everybody doesn't go to college. In Japan the kids who don't go to college, the lower 50 percent of the distribution, are way ahead of our kids. Japan and Korea and many others don't have the large number of children that we have who simply can't read and write.

I don't have to tell you the figures, but I often point out in my speeches that half of the kids in this city, which some people think is the capital of the world, never graduate from high school, and of the half that do, half of them can't read and write.

Effectively, in my judgment, we are taking somewhere between 15 and 30 percent of our children and essentially throwing them on a slag heap and our competitiors in Japan and in Europe and elsewhere don't do that. That is a tremendous competitive disadvantage.

First, I support expansion of the Head Start program and I am in sympathy with most of the comments that Bob Reischauer made here. Yet, having said that, I am not sure that our problem is primarily one of not enough money or not enough programs. Let me just cite a couple of recent personal examples why I feel that way.

It just so happens that yesterday I won a court case. As these things go it wasn't a major court case, but for me it was very important. I was accused of assault and battery on a 9-year-old boy. My son's school had an Oktoberfest back in October and I was a parent volunteer to help run the dart game. Some of the kids were acting up and stealing the prizes, and I caught one of the kids who stole a prize and I gave him a swat on his fanny. The mother went down to the police and accused me of assault and battery. The prosecutor prosecuted the case and we went to court yesterday. I had to spend $10,000 on a lawyer to win this case, which I am glad to report that I won.

We are not talking about New York City. This is not ghetto land. This is Potomac, MD. This is a private school in Potomac, MD. It cost me $7,000 a year to send my kid to this school, which I am not going to do anymore.

There is something wrong about a system in which you can't even maintain discipline at a private school without fear of going to court.

A year ago my older son, who goes to Walt Whitman High School, which again is not ghetto land—Walt Whitman is widely touted as one of the best public high schools in the country—had a very expensive ski jacket. My son is a candidate for the U.S. ski team. A very expensive ski jacket was stolen from his locker.

We know who stole the jacket. We went to see the principal and said, "Would you please call this kid in?"

The principal says, "Well, gee, I don't know if I can do that."

"Well, why not?"

"Well, you know, the police," and blah-blah-blah.

Finally, I threatened to call the police. Only after I threatened to call the police did the principal finally call the kid in and we got the jacket back.

When you and I were in high school that problem would have been solved just like that.

One of the secrets to Japanese success is they put 50 kids in a class and the kids are quiet and they listen. The teachers have the ability and the authority to discipline them. We can't get away with 50 kids in a class. Anything over 25 kids is chaos in this country.

Talk about payoff and labor saving. If you can double the number of kids in a class you get twice as much for what you are spending. And that's a matter of discipline.

I am willing to accept that Japan is a different culture, but 25 years ago when I was in school we had better discipline than we have now. That is not a matter of culture. It is just some of the crazy things that we have done to ourselves.

If there were steps that you could take to give teachers more authority in terms of discipline, to insulate people from lawsuits and that kind of stuff, that wouldn't cost a lot, but there might be a substantial payoff from it.

A second thing that I think about is in a little bit different location. Could I ask you how many members are on your subcommittee?

Representative SCHEUER. Members of Congress?

Mr. PRESTOWITZ. Yes.

Representative SCHEUER. Six or seven.

Mr. PRESTOWITZ. I only see two here.

Representative SCHEUER. Of course this is the Christmas season and they are home now.

Mr. PRESTOWITZ. I understand that. I am not being critical of you in any way. If the Russians had just launched Sputnik and you were holding hearings on how to respond to the Russians, everybody would be here. The place would be full.

Representative SCHEUER. They would be flying in from their home districts.

Mr. PRESTOWITZ. Nobody takes this seriously, frankly. Nobody really thinks this is important. Who were the first nominations the President made to his Cabinet? Was it the Secretary of HUD or Education? No. It's the Secretary of State. That's what is important, the Russians, Gorbachev, missiles. That's where we put our values.

Until you start thinking about the Secretary of Education as the major appointment you are making, we can all sit down here and jabber away for as long as we want. I am preaching to the choir, I know.

I have a daughter who is living in Kansas City. She is actually studying education and she participates in a volunteer program to teach illiterates to read and write. She derives tremendous satisfaction from her participation in the program. I don't know that it would be terribly expensive—it would cost something—to have an education corps like the Peace Corps and turn it loose on our cities and our educational problems.

Representative SCHEUER. A volunteer corps.

Mr. PRESTOWITZ. Yes. There are a lot of people out there who would volunteer. I would volunteer.

Representative SCHEUER. There are senior citizens who have had life experience who are now retired. They could do it. College students who could gain a few extra credits. Even high school juniors and seniors who are doing well academically, they could help. There are a lot of people out there who would be interested in the course credits and also in the pure satisfaction.

Mr. PRESTOWITZ. Forget about the ghettos. If you look at the colleges and the better schools in this country, I don't believe our kids even in the best institutions are getting as good an education as they used to get.

I mentioned Walt Whitman High School. This is supposed to be a real hotsy-totsy high school here in Maryland. I just went to plain old Podunk High School in Wilmington, DE. I came out of high school with a better education than my son got coming out of Walt Whitman High School.

I went to Swarthmore College. When I went to Swarthmore freshmen took five courses, and you had to take a foreign language and you had to take science and you had to take math. Now freshmen take four courses, pass-fail. You don't have to take a foreign language, you don't have to take science, and you don't have to take math.

It doesn't cost very much just to reinstitute the old standards. You wouldn't have to pass budget legislation. All you would have to do is say freshmen have to take five courses.

Representative SCHEUER. As a Swarthmore College graduate, I regret what you are reporting to me.

Mr. PRESTOWITZ. They tell us it is still the best, but the best isn't as good as it used to be.

That is basically what I have to say.

Representative SCHEUER. Congressman Williams.

Representative WILLIAMS. Mr. Reischauer, you mentioned several times in your prepared statement and also mentioned orally that postsecondary education is not yet faced with a crisis. We have had witnesses come before my Postsecondary Education Subcommittee who would parallel those thoughts, but who would add—and I would like you to comment on this—that for some Americans, low-income and minority Americans, access to postsecondary education is at a crisis level.

My question to you is, if we face a crisis in not having full access to all Americans to colleges and universities or postsecondary education of one type or another, does not all of postsecondary education and do not all Americans face a crisis?

Mr. REISCHAUER. We can get into a semantic debate here over what we mean by crisis. I think that the evidence shows that the rates at which minority high school graduates enroll in college aren't declining tremendously. To be sure, the amount of aid that is provided through Pell grants is falling in real terms. That is a problem and we should remedy it.

I don't see that this year or last year was significantly worse than the 2 or 3 years before. We have had a problem in this country of the sort you have described. We made a little progress on it in the late 1960's and early 1970's and then haven't accomplished much since then. As a nation, we should have made more progress because that is where our stated values are.

In that sense I would certainly say it's a problem that affects the Nation as a whole and we should do something about it. Whether that constitutes a crisis or not is debatable.

Representative WILLIAMS. The percentage of minority high school graduates attending higher education is less than it was in the mid-1970's and the trend line is down. We could debate or consider whether that is a crisis or not or whether we are on the threshold of crisis. I agree with you. It could be a semantic argument. But the trend lines are clear. It appears that for millions of Americans there is a crisis in lack of access to higher education.

Given that we both agree there is a problem there, is the proposal you have for a lifetime repayment of loans designed to meet that problem?

Mr. REISCHAUER. No, it isn't at all. What it is meant to do is to recognize that for most Americans the financial problem is how to spread the cost of higher education over the period in which this investment pays the student back a dividend.

Under our current policies, the Federal Government or State Governments devote some resources to helping middle class, lower middle class, and even upper class children with that financing problem. I would rather shift more of the burden onto these students. This would free up resources for the students who are really needy and the level of grants for such individuals could be increased.

Representative WILLIAMS. As I understood the proposal that Michael Dukakis made for repayment, which is somewhat similar but perhaps different in details than the proposal that you are describing, the Dukakis proposal was means tested to a degree, sort of reverse means testing, and that is to say that it would have resulted in a larger payback from higher income graduates throughout their lifetime than from lower income graduates throughout their working lifetime. Is that how your proposal would work?

Mr. REISCHAUER. Yes. The Dukakis plan is similar to the one described in my prepared statement with a few modifications designed to take some of the political rough edges off of the proposal that I had made.

The proposal is to make borrowing an entitlement from a trust fund. In return for borrowing from this trust fund, the borrower's Social Security payroll tax rate is changed for the rest of his or her life by an amount that varies by the amount borrowed.

The simulations that I did suggest that 1 percentage point would have to be added to the payroll tax for every $40,000 that a student borrowed. A person who earned $40,000 would obviously pay back twice as much as a person who averaged $20,000 in earnings over their lifetime. So there would be redistribution among the borrowers.

Representative WILLIAMS. I assume either because of family tradition or their own belief in their abilities, the student most likely to be a high-income earner during his or her lifetime would be the least likely to borrow from the trust fund because they would have to pay back more or else they would be subsidizing, in effect, the low-income borrower.

Mr. REISCHAUER. In the paper attached to my prepared statement I go through several ways of reducing that type of response. The real question is, Compared to what? What are the alternatives?

Certainly I would not advocate a proposal that would lead parents to say, "I'm not going to save for junior" or "I don't care that my daughter will have a higher payroll tax for the rest of her life."

The question is, What is this individual going to do that you describe? A person can certainly go out to a private bank and borrow, but the rate differential might be such that it is still better for them to be in the new system.

Representative WILLIAMS. I am interested in the proposal. Hopefully we can talk after the first of the year in more detail about it.

Mr. Prestowitz, I visited a number of years ago with the then-Minister of Education in Japan. I was struck by something he said to me, which was that Japan was preparing to form a national commission which he hoped would rather dramatically change elementary and secondary education in Japan.

When I asked him in what direction he wanted it changed, he laughed and said, "We want our schools to look more like American schools." Then I laughed. We both understood that we were creating commissions to get our schools to look more like his and he was creating commissions to get the Japanese schools to look more like ours.

When I asked him what it was that he liked about the American school system, he said its inefficiency. "In our country," he said, "we in effect select the brain surgeons. In your country you have a system that says 'you want to be a brain surgeon? You all come, give it a try.' "

He said, "You've made way for the late geniuses, the late bloomers; you've made way for innovation; you've allowed room for expertise, and we have not, and thus we wait for you to invent it and then we put it on the assembly line, improve it, and in a very efficient, lockstep manner we sell the product back to you."

You studied the systems in Japan. I would be interested in your comment generally about his view of the Japanese system versus the American system.

Mr. **Prestowitz**. The Japanese feel that they have bettered us in virtually everything, but they feel that they still haven't proven that they are as creative. So now the thrust in Japan is to prove that the Japanese are also creative. There are these commissions in Japan looking into how to create more individuality in the school system, how to encourage creativity, and so forth.

I suppose that from the Japanese point of view it is a reasonable thing to do. I guess my own feeling is that the United States has been creative for some time. We were creative in the 18th century and 19th century and certainly in the 20th century. Our school crisis is only the last 20 or 30 years.

I don't think it's a tradeoff. I don't think we have to say, "Well, golly, we are so bloody creative and we don't want to foul that up." Sure we are creative. We are a creative society. We always will be. We don't have the homogeneity that the Japanese have and that causes some problems too, but this is a fermented and open society and new ideas are going to arise here. And we have an elite. We have the best colleges and universities in the world at the elite level. No doubt about that. But that's not our problem. Our problem is we don't send kids to those colleges anymore. If you go to MIT it looks like downtown Tokyo or Taipei. That's our problem.

I don't take any comfort at all that the Japanese are trying to look more like us. When they put 50 kids in a class and we put 25 in a class, they are getting twice as much as we are getting. Maybe they lose something in creativity. The distance is so great that I can't take much comfort that somehow we are going to win just because we are less efficient.

Let me come back to something else you were talking about with Bob Reischauer. We tend to measure our performance an awful lot by how many people go on to a university, to the college level. I am not sure that is very useful. There are an awful lot of college graduates out there who can't get jobs or who are getting crummy jobs. There are an awful lot of kids out there who majored in English literature at Podunk University whom nobody wants to hire. Try to get an electrician. Try to get somebody to fix your car. You can't find those people.

Germany and Holland and France and Japan have very strong apprenticeship programs and vocational training programs. This is where your private sector comes in.

I disagree with Bill Woodside and some of these guys who say that the private sector shouldn't help. I agree the private sector shouldn't replace the public sector, but the corporations are also customers for this product.

Representative **Scheuer**. They are customers for the skilled manpower.

Mr. **Prestowitz**. Yes. And it's to their advantage to have this kind of skilled manpower. I don't know that a corporation is really the best place to teach English literature or even calculus, but you sure as hell can teach people how to be electricians in corporations, or how to be word processor operators or whatever it is.

I had a Dutch au pair living with our family this past year. She wants to be an airline stewardess. To be an airline stewardess in Holland she goes through a prescribed training course and she takes an exam and then she becomes a certified, qualified stewardess. We don't do that here. People go down to Pan Am and make a job application and Pan Am gives them a 2-week training program and then they are stewardesses.

Not everybody should go to college. Not everybody is equipped to go to college and not everybody will get anything out of college. It doesn't bother me that only 30 percent of the kids go to college. What bothers me is that those who graduate from high school or from junior colleges don't have anything useful to do. We need more skills out there. I think we ought to focus on that.

Representative WILLIAMS. I had mentioned the term "postsecondary" education, and then I said postsecondary education of any type. We have a very significant public vocational education system in America.

Mr. PRESTOWITZ. It's useless.

Representative WILLIAMS. One could debate whether or not it is useless, but it is significant. We also have a very significant proprietary school system in America.

I would agree with you to this extent. When we measure success only as entry and completion at a college or university I think we have missed a great deal of other criteria for success: completion at a good proprietary school, completion at TWA's stewardess school, a good vocational school.

The problem in America is that too few minority, low-income students are going on to any of those institutions. The problem is not that they aren't going to Harvard. Hell, they never went to Harvard. Low-income people never went to Harvard in the United States. The proof of that is that we hold up the few who did as examples. Our difficulty, it seems to me, is that not enough of the minority and low-income students are attending and completing postsecondary education of any kind in the United States.

I have appreciated your testimony and hope to hear more ideas from both of you as Congressman Scheuer and I work together to see what needs to be done to rearrange education in the United States.

Representative SCHEUER. The sun is not only over the yardarm, but it is pointing toward 2 o'clock. You have both been very patient and long suffering. We appreciate your testimony very much.

I am going to ask one question for either of you.

What do you think is the single most important thing we could do in order to improve education achievements in secondary schools for minorities and to improve minority access to postsecondary education?

Mr. PRESTOWITZ. We are talking about places that don't have families. Why is Japan so successful? Because those kids all have mothers and those mothers are all down there getting them educated. What we essentially need is some substitute for the family here. That is why I came up with my Education Corps proposal. I don't think it's money. I don't think money is the answer.

I gave a speech in Dallas recently in which I said that whether the United States is able to compete with Asia will be determined in the ghetto, and it will be determined by whether those of us who live in privileged circumstances are willing not to take our money, but to take our time and to go down there and take kids by the hand and see to it that they get taken care of. I really think that's it.

I really applaud Gene Lang. I think more people ought to do that.

Representative SCHEUER. I applaud Gene Lang, too. As you undoubtedly know, he also is a Swarthmore graduate. Having said that, I have to express some reservations about a system that relies on private philanthropy to motivate kids and to do the handholding that gets them through secondary school and perhaps motivates them to go on to postsecondary. There has to be a better way of doing it than relying on the charitable instincts of a few enlightened businessmen. We have to institutionalize it and create a structure.

Mr. PRESTOWITZ. You have to get a lot of enlightened businessmen.

Representative SCHEUER. Yes. Or a lot of enlightened retirees. They could be bakers, they could be plumbers, they could be any trade at all as long as they are literate and as long as they can reach out a helping hand and communicate with these kids. They could be black, they could be white, they could be working-class people, they could be retirees, they could be college kids who want some extra credits, they could be high school kids in their junior and senior year who want to help out in that kind of an environment.

We ought to institutionalize it and we ought to at least fund the institution that connects a caring person, who for his or her own purposes wants to be a volunteer, who is willing to contribute something of themselves, to that ghetto kid who urgently needs help.

Mr. Reischauer, what do you think is the most important thing we can do?

Mr. REISCHAUER. I am very sympathetic to these approaches but also skeptical that they will make more than a small dent in the problem.

Representative SCHEUER. What will make a big dent?

Mr. REISCHAUER. It is not clear that anything outside of very radical change in our institutional structure will. We are talking about inner city schools which are bad environments. There is no question about it.

If a few good men and women devote themselves to these programs maybe we can improve the lives of a few individuals. We know that when one class is taken over and significant resources are poured into that class, the Eugene Lang example, success results. But what if every class in that school had a Eugene Lang? Maybe a lot of the effect would be washed away because the children wouldn't feel special anymore. We don't know. These are open questions.

Representative SCHEUER. In the old days of CCNY, a public university, the kids who went there knew that the class above them got in tuition free and the class below them got in tuition free just as they got in tuition free, but the fact that they weren't special didn't seem to deter those kids.

Mr. **Reischauer**. They were a highly selected group of motivated individuals coming largely from families that put a tremendous emphasis on education.

Representative **Scheuer**. You are absolutely right.

Mr. **Reischauer**. We aren't dealing with that situation now.

Representative **Scheuer**. You are absolutely right.

Mr. **Reischauer**. Now we confine kids to geographic areas that their parents happen to live in. I think we have to begin questioning that. We should be going toward open enrollment. I think we have to begin relaxing the control that central administrations have over individual school buildings, putting more power in the hands of principals and, to some extent, in the hands of teachers, and, dare I say it, having more competition within the sector.

Representative **Scheuer**. Taking a leaf from Mr. Gorbachev's book. Decentralizing decisions.

Mr. **Reischauer**. If he can swallow his ideological pride, there is no reason why we shouldn't be able to.

Representative **Scheuer**. We are ending up on an upward note. I want to thank you for your patience and your forbearance and for the excellence and the thoughtfulness of your testimony. Thank you very much.

The hearing is adjourned.

[Whereupon, at 2:05 p.m., the subcommittee adjourned, subject to the call of the Chair.]

[Gov. James J. Blanchard, of Michigan, was invited to participate in this hearing day, but was unable to do so. His statement follows:]

STATEMENT OF HON. JAMES J. BLANCHARD, GOVERNOR, STATE OF MICHIGAN

Thank you for the opportunity to testify today on why assuring full access to preschool and postsecondary education for all students is important to America's economic future.

We know from experience in Michigan that investment early in a child's formative years pays tremendous dividends in later years. It provides an opportunity for better, more productive lives. It results in a better, more literate workforce. It is clearly a better use of public dollars.

We know this through our nationally acclaimed Perry Preschool project in Ypsilanti, Michigan, that was begun in 1962.

Disadvantaged three- and four-year-olds were randomly assigned either to a group that attended the Perry Preschool program or to a group that did not.

A follow-up on both groups at age 19 showed that children in the Perry Preschool program do better in school, are more employable, and are better members of the community.

In education:

- More are literate (61 percent versus 38 percent).
- Fewer are school dropouts (33 percent versus 51 percent).
- Fewer are classified as developmentally delayed (15 percent versus 35 percent).
- More attend college or job training programs (38 percent versus 21 percent).

In the world of work:

- More hold jobs (50 percent versus 32 percent).

In the community:

- Fewer commit crimes (31 percent versus 51 percent).
- Fewer are on welfare (18 percent versus 32 percent).

In addition to this evidence of the benefits of preschool, teenage women who participated in preschool had a lower birth rate than those who did not (64 children versus 117 children per 100 women).

The Perry Preschool project demonstrated that every dollar invested in a one-year high-quality program for at-risk children yielded six dollars in taxpayer savings. That's a tremendous human investment dividend.

The Perry Preschool program results were achieved by good preschool programming:

-- Developmentally appropriate curriculum and assessment procedures.

-- Teaching teams that are trained in early childhood development and continue to receive such training.

-- Administrative support that includes curriculum leadership.

-- Classes with two adults and fewer than 20 children.

-- Systematic efforts to involve parents as partners in their children's education.

Programs like this are not inexpensive. But the findings in Michigan highlight the fact that a good, well-funded preschool program makes good economic sense.

While child care and preschool education are not synonymous, they are closely related. In discussing preschool, we should not ignore child care.

We need quality child care not only as an investment in our future, but as an integral component in increasing our country's competitiveness.

The massive job training and economic development effort being undertaken in our nation cannot be complete without adequate child care for the young children of workers and trainees.

It is a fact of life that women, the traditional child care providers, are a significant and growing segment of the workforce.

Today in our nation, one-half of the mothers of infants are in the labor force. The majority of female employees will have babies during their work careers.

Quality child care, followed by quality preschool, is a necessity in this new era of single-parent families and working mothers.

We in Michigan firmly believe that the most productive human investment we can make is at the preschool level. We have launched a massive $80 million preschool program over the next four years -- modeled after the Perry Preschool program -- to cover every "at risk" four-year-old in Michigan.

We have already committed $17 million in state dollars for this new program which began September 1, 1988.

We will add at least $20 million more each year over the following three years to build the program to $80 million by 1991, and provide the option of a half or full day program.

In Michigan we are spending hundreds of millions of dollars in the largest prison construction program in our state's history. By 1991, we will have built 20 new permanent prisons and more than doubled the capacity of our prison system in just six years.

I am convinced that a good preschool program would have made that prison construction program unnecessary.

We believe that preschool education is an essential ingredient in preparing Michigan's future workforce for the challenge of global competition.

And since global competition for jobs is today's reality, postsecondary education is also absolutely essential. The best jobs will go to the best-educated workers with the highest skills.

We are very proud in Michigan of our 15 four-year state universities, 29 community colleges and our many independent colleges and proprietary schools.

And we are working very hard to make these outstanding institutions accessible and affordable to all qualified students -- regardless of the financial status of their families.

I believe that postsecondary education must be affordable and accessible. The best postsecondary system, if not affordable, is no system at all.

And a system that does not attract and work to keep those minority populations in college who traditionally do not attend is not serving our state or our nation.

In order to make the system more affordable, we in Michigan have increased funding for higher education by 57 percent since 1983 -- a period when inflation was 15 percent.

We have also increased student financial assistance -- aid to Michigan students attending Michigan universities -- by over 75 percent in the last five years.

And we have implemented some innovative new programs that I would like to briefly outline.

Our King-Chavez-Park program is making strides to increase minority enrollment in our university system and retain the students on campus once they have been recruited. It also provides revenue to universities to recruit and retain minority university faculty.

The program provides for the university to bring minority students to the campus early in their high school career, acquaint them with the campus, explain the potential funding and assistance they will receive if they decide to attend college. It also includes a follow-up system with students during their high school years.

TIP -- our Tuition Incentive Program -- provides free, state-funded community college education to students from poverty families in Michigan who meet certain attendance and performance standards in high school.

This is our first year with the program, but we believe it will do much to inspire our young people to complete high school and continue their education so they are prepared to enter the job market.

The days when a student could graduate from high school and get a $21 dollar-an-hour job on the line in an auto plant are gone forever.

In our new high tech world, postsecondary education and training are a necessity. TIP represents an avenue to higher education for many Michigan students who otherwise might be inclined to drop out of school and never reach their potential.

We also are especially proud of our Michigan Education Trust, or MET, program -- the first of its kind in the nation -- which we inaugurated this year.

MET is a prepaid college tuition plan in which the state guarantees that the child's future tuition will be paid when they attend any of Michigan's 15 state universities. Parents, grandparents or others prepay a fixed amount into the MET fund, depending on the child's age.

The prepayment for a newborn infant was $6,756 for four years tuition.

At the November 30 deadline for this year's enrollment in MET, parents, grandparents and others made prepayments in MET for more than 40,344 Michigan youngsters. The prepayments for this first enrollmment in MET totaled $265 million.

The overwhelming response to this program indicates that parents feel a college education for their children is very important. It also shows that parents have a great deal of anxiety about the future cost of a college education.

In addition to the increased state funding for our colleges and universities, we have provided more than $514 million in bonding in the past five years to build and equip the facilities necessary for our technology-based students to win the jobs of the future.

We also have targeted over $100 million to a Research Excellence Fund to finance cutting-edge research in our universities in fields critical to our state's economic future.

Each of our public universities must submit proposals to access the fund. It provides resource dollars for our universities and long-term economic growth for our state.

Our economic development strategy is to make Michigan the world center of advanced manufacturing.

We know that processes and materials can be exported anywhere in the world. But a well-educated, highly skilled workforce can't be exported. That's Michigan's competitive advantage. And the key to maintaining that competitive edge is education.

The new technologies and processes being invented today require a higher level of education and job skills than ever before. More than half of the new jobs being created between now and Year 2000 will require postsecondary education. Our workers must have a variety of skills -- math and computer skills, problem solving skills, communication and teamwork skills to win the jobs of the future.

However, the states cannot continue to carry the burden for the future education of our nation alone. The federal government must be a partner with us in making this investment in our young people for the future. It must be a national agenda in partnership with the states.

IMPROVING ACCESS TO PRESCHOOL AND POSTSECONDARY EDUCATION

THURSDAY, DECEMBER 15, 1988

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON EDUCATION AND HEALTH
OF THE JOINT ECONOMIC COMMITTEE,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:36 a.m., in room 2359, Rayburn House Office Building, Hon. James H. Scheuer (chairman of the subcommittee) presiding.

Present: Representative Scheuer.

Also present: Deborah Matz, professional staff member.

OPENING STATEMENT OF REPRESENTATIVE SCHEUER, CHAIRMAN

Representative SCHEUER. It's a pleasure to open the second day of hearings on this very important, in fact, critical question of improving access to preschool and postsecondary education in our country. We have a very brilliant panel here today. I've read the testimony and it's absolutely marvelous.

Yesterday we released a report entitled "The Education Deficit." It is a report of this subcommittee drawn upon 9 days of hearings that we've had in the last year on the question of how we can improve our education system so that we have a productive, skilled, talented, and competitive work force; a work force that again places us at the cutting edge of competitive competence in a global economy.

A number of recommendations flowed from these hearings. Among the most significant recommendations was making early childhood education available to every American child. That means making Head Start an entitlement. Right now the kids that get it the most need it the least. It may surprise you to know that I was a Head Start kid. Yes, I'm a Head Start kid. In 1923, I went to a very enriched preschool program.

So yes, I was a Head Start kid. I benefited from an extension of the education system down to age 3.

I was also a beneficiary of a research and demonstration program that extended the public education system up from grade 12. Society didn't want me hanging around street corners pushing dope. And so they said to me, "we're going to give you a ticket to as much postsecondary education as you can absorb."

I went to Columbia Law School, and all of my tuition, and all of my books were paid for, in addition to receiving the equivalent of about $300 or $400 a month to live on. It was $75 in those days, 1946. The program which I am talking about, of course, is the GI bill of rights.

At this time, I want to express my thanks to several people who have made remarkable contributions to this hearing. First, is one of the Joint Economic Committee's senior economists, William Buechner, who, at my request, did the first professional cost-benefit analysis ever done of the GI bill or rights following World War II. It was a marvelous job, and I want to express my thanks to William Buechner, wherever he is.

Next, I want to express my thanks to Deborah Matz sitting here on my left, your right, for having done all of the work, the painful and painstaking work, going back over 6 months, putting this set of hearings together. She's a brilliant professional, and I am very grateful to her.

The third person I want to thank is Bob Atwell, one of our opening witnesses here this morning, who held our hand and counseled us and guided us through the labyrinthian maze of all the talented people out there who could help us and who could participate in this remarkable set of hearings. I'm very grateful to you, Bob.

The cost-benefit analysis of the GI bill of rights indicates that for every dollar of expenditure that the Government made, we received back somewhere between $5 and $12 in benefits to our society. And that's a very conservative figure, because, for example, it didn't count the increased taxes that these men and women paid, which, by itself, paid back the GI bill of rights investment to our country. And it didn't count the reduced costs of welfare, and perhaps some avoided costs in the criminal justice system resulting from turning out this cadre of well-educated young men and women.

It also didn't quantify, and I don't know how you could, the fact that it was this trained group of men and women at the blue collar and the professional level—scientists, mathematicians, engineers, business leaders, and so forth—who led our leap into the postindustrial age starting in the late forties and continuing through the fifties.

How would you put a value on that? How would you put a value on eliminating a substantial part, if not all, of the subgroup in American society that is unskilled, uneducated, and can't read, write, or count? How would you quantify the benefit to our society of eliminating this subgroup in our society? And that's what we're talking about.

Our report made some specific recommendations such as universalizing access to Head Start; lengthening the school year; keeping schools open evenings, weekends, holidays, and summers; perceiving our schools as capital investments in the communities which should be used extensively for a wide variety of civic needs like alcohol and drug counseling, adult literacy programs, perhaps some kind of vocational education; teaching higher order skills in the schools, not only reading, writing, and counting but teaching young children how to think, how to learn, how to solve problems and a vast updating of our vocational education programs which involves increasing the availability and quality of on-the-job training.

And these are subjects which several of you have referred to in your testimony.

Last, but not least, the report recommends that we give serious consideration to assuring all qualified students an entitlement for up to 4 years of postsecondary education.

Because this wasn't discussed in the 9 days of hearings, we've extended the hearings 2 days, yesterday and today, to consider whether the time has arrived when we ought to be simply extending the education system.

Former Assistant Secretary of the Department of Labor, Arnold Packer, testified before the subcommittee, that only 1 out of 10 new workers has the skills that will be required by 3 out of 4 jobs that will become available by the turn of the century.

Half of the new jobs created before the year 2000 will require some postsecondary education and almost a third will require a college education, up from 22 percent currently.

A recent op-ed article in the New York Times, by Ronald Steel, a professor of international relations at the University of Southern California, states that international power is increasingly defined "by production, innovation, education, trade, and national cohesion." Because of the vast sums that the United States and the Soviets have spent arming themselves against each other, he maintains, our economies have become distorted and weakened. "Today," he says, "many of our allies are richer than we are and steadily drawing ahead of us in productivity, competitiveness, and standard of living."

I have a Presidential commission report which evaluated the Nation's higher education needs and recommended—and listen to these words carefully—"The time has come to make education through the 14th grade available in the same way that high school education is now available."

This Presidential commission recommended an extension of public education through the first 2 years of college.

The commission concluded:

> We have proclaimed our faith in education as a means of equalizing the conditions of men. But there is a grave danger that our present policy will make it an instrument for creating the very inequalities that it was designed to prevent. If the ladder of educational opportunity rises high at the doors of some youth and scarcely rises at all at the doors of others, while at the same time formal education is made a prerequisite to occupational and social advancement, then education may become the means, not of eliminating race and class distinctions, but of deepening and solidifying them.

Now isn't that a terrific quote from a Presidential commission, and doesn't it describe very well the situation we're in today?

Does anybody remember under which President this commission served?

Mr. NEWMAN. Harry Truman.

Representative SCHEUER. You're absolutely right. This prophetic message was written in 1947 by the Truman Commission on Higher Education.

Now, just think. We started out our K through 12 program in, roughly, 1910. So it has been 80 years, more or less. The 1947 commission report came halfway from the outset of K through 12 to the present date, and at the halfway point, 40 years after the inception of K through 12 public education, they said we ought to extend it up 2 years—40 years after the outset, 40 years ago.

So does it stretch the imagination too much to say at the present time, by hook or crook, by whatever means, we ought to make 4 years of postsecondary education an entitlement for kids who are doing adequate work, who are benefiting from the program. I don't know why this should be a revolutionary statement, but it seems such.

Now if we would adopt the philosophy that is enumerated in Professor Dertouzos' excellent prepared statement, we would stop addressing ourselves toward the short term, as he characterized it and instead look ahead. Maybe we ought to set a national goal 5, 10, or 15 years from now, to assure our students access to 4 years of postsecondary education, and by that time the comparable may include a couple years of graduate work too, for every achieving young person in this society. And I hate to anticipate your testimony which was really so brilliant and stimulating, but I have to refer to Bob Atwell's figure. He says one of the problems in our society is that 90 percent of the young people from middle or upper income families who do well in school go on to colleges. But only 60 percent of the young people from families with very limited means, who do good work, go on to higher education.

So we are "excluding out," to quote Sam Goldwyn, we are "excluding out" of the marvelous experience of college education, 40 percent of the young kids who are doing well in high school but are from poor families. Now that is unacceptable in our society. Former Congressman and the current president of New York University, John Brademas, said yesterday he sympathizes with this concept of simply biting the bullet and saying pubic education should now go from K-minus to grade 16. He sympathizes with that, but there is no cornucopia out there. And those were his exact words.

And of course he's right. There's no free lunch. But maybe there's a cornucopia if we will it. Maybe there is a source of funds if we will it.

Lou Harris testified before this subcommittee that he conducted a poll in which he asked people if they would be willing to pay 1 percent additional taxes for education if they knew the money wasn't going to go down the same old rathole, if they knew that something different, something good, something refreshing, something innovative and stimulating and productive was going to happen? And roughly, 70 percent of them, as I recall, said yes, they would.

I suggest to you that a society that is willing to produce $30 billion for the buyout of a particular company just by laying on debt, junk bonds, as we call them, has the capacity to spend $30 billion at least as a starter in approaching the goal of universal access to postsecondary education for students who, in their secondary education, have proven that they would value it and they would benefit from it.

It seems clear that we should stop looking at our education successes, the way we look at our education failures. Head Start was the gem in the crown of the poverty program. It was without fundamental flaw. Its intellectual underpinnings were justified by 20 years of results from the Head Start program itself and close to a century of results of the salubrious impact of an enriched preschool experience for parents who could afford it.

The problem is, over the last 75 or 80 years, the kids who needed it the least, got it the most. The kids from middle and upper middle class homes, homes that themselves were education factories, had access to Head Start. But the kids from deprived homes, improverished homes, intellectually and every other way, those kids got it the least. So that today, only about one-fifth of the kids from improverished homes who could benefit from Head Start get it, and 40 percent of the kids from low-income families who were doing well in high school do not have access to college.

To me that is a moral imperative for us to face up to, and in a society where leveraged buyouts are the order of the day, where we seem to be able to loosen up tens of billions of dollars for one group of corporate executives to take over the assets of another group of corporate executives with not one whit of production, not one whit of contribution to society, we ought to be able to afford universal access to preschool and postsecondary schools for eligible kids. It's a question of values; it's a question of hard choices; it's a question of biting the bullet and figuring out what we have to do just to preserve our standard of living which is on the slippery slope if we don't alter the flow of events.

We are on a consumer spending binge in this country. We're spending $160 billion in consumer electronics of every description. We're borrowing $160 billion from the central bankers around the world to finance a consumer spending binge, at the same time that we're starving education, and denying four-fifths of the lower income kids in our society from the benefits of Head Start and denying 40 percent of the lower income kids who are doing well in high school of the benefits of a college education.

I think this is a moral imperative for us to face up to.

All right; let's get on with the testimony. I hope very much that you will address yourselves to the single question. We're engaged in a tunnel vision hearing this morning. Is it important for us to extend access to a public education system 2 years down and perhaps 4 years up? Is that important? What are the costs of doing it? What are the costs of not doing it? How do you value the costs of a society that is losing its competitive edge? Now I know all of you have your own creative education projects that you've worked on through the years, and to the extent that they're relevant to this question of expanding access downwards and upwards, of course, tell us about them. But I hope you won't use this as a forum for engaging in a broad searching analysis of our national education system, constructive as that would be. Hopefully, we will provide all of you with a forum to do that on another day. We hope that you'll address yourself today to the question of access, extending the school system downward, extending the school system upward.

So with that preliminary remark or two, let's get into the testimony.

Bob Atwell—first, I want to repeat my thanks for helping conceptually in organizing this hearing, in directing us and hand-holding us and providing us invaluable guidance in planning this hearing in the spring of this year.

As president of the American Council on Education, Bob Atwell is a leading spokesman for American higher education. He has been of enormous help, as I mentioned, in organizing this hearing. His organization is an umbrella organization for the Nation's colleges and universities, whose membership includes more than 1,400 degree-granting institutions and over 20,000 educational associations.

Bob, why don't you take 6 to 8 minutes and chat with us informally. Since there are no other members here yet, I may ask a question from time to time.

Pat Williams of Montana, the chairman of the Postsecondary Education Subcommittee, was with us here for a 4½-hour hearing yesterday. He has the flu this morning, and unfortunately, he's out of commission.

OK, Bob, why don't you take such time as you may wish.

STATEMENT OF ROBERT H. ATWELL, PRESIDENT, AMERICAN COUNCIL ON EDUCATION

Mr. ATWELL. Mr. Chairman, I appreciate very much the opportunity to participate in these hearings on behalf of the American Council on Education. Later on in this panel, you'll also be hearing from President Judith Eaton, who chairs the board of directors of the American Council on Education.

I have a prepared statement which I would like to introduce for the record and just make some somewhat informal comments about that, with your permission.

Representative SCHEUER. Yes. There being no objection, it is so ordered. And I might tell all the witnesses that their prepared statements will be printed in full in the record, and we've read everything that we've received. I haven't had a chance to read Mr. Silber's prepared statement because it was just delivered this morning. But of the testimony that we have in, we've read it, so you don't have to repeat your testimony verbatim, just take off and ruminate with us.

Mr. ATWELL. I think it's especially appropriate, Mr. Chairman, that this subcommittee investigate the vital role of education in the American economy and the benefits to be gained by guaranteeing full access to preschool programs and postsecondary education for all qualified citizens, but I think it's also important that you recognize the noneconomic benefits of these programs to individuals in society, and so I would like to use part of my time to comment on that topic.

But first, I cannot stress strongly enough the importance of higher education to the improvement of America's competitive position in the world economy. Yesterday President John Brademas of NYU spoke in his testimony of the "Memorandum to the 41st President of the United States," which was prepared by the American Council on Education's Commission on National Challenges in Higher Education. I assume you've seen this document, Mr. Chairman. It specifically addressed the role of higher education in the future health and competitiveness of the American economy, and it offered a set of clear recommendations for ways to build on the historic partnership between the Federal Government and the Nation's colleges and universities to help revitalize the economy, to expand educational opportunity, and to educate Americans for an increasingly interdependent world.

I would like to submit a copy of that document for your record and would be happy to provide additional copies for others who might wish it.[1]

And then just 2 weeks ago the Council on Competitiveness, of which I'm a member, issued a new report entitled "Reclaiming the American Dream." I won't go into detail on its suggestions for reducing the Federal budget deficit and improving our trade posture, but I would make the observation made by the authors of the report, who include the leaders of some of our foremost corporations, labor unions and educational institutions, that over the long run, this Nation will not be able to maintain, much less raise, its standard of living without attending to problems such as the troubled educational system, its deteriorating physical infrastructure and declining technological leadership. And that report recommends expanded Federal commitments to programs that will benefit disadvantaged youth, improve math and science education, broaden access to postsecondary education and retrain dislocated workers.

Obviously, colleges and universities have an important stake and, indeed, an essential role in these areas. Competitiveness simply cannot be maintained or improved without additional investment in higher education. However, I would point to other strong reasons for the Nation to extend educational opportunity to a broader spectrum of citizens. Economists may debate whether the benefits of education redound primarily to the individual or to society, but that debate really ignores education's contributions to societal change, the preservation of our cultural heritage and the advancement of knowledge through research and public service.

Our current Federal student aid programs were developed over the past three decades to help achieve the national goal of equal opportunity about which you've spoken here this morning. There's no question that they have served this purpose effectively. However, it is now clear that the Federal effort to meet the goal of postsecondary opportunities has faltered during the 1980's, and while funding for these programs it is true has increased 28 percent, thanks to the leadership of the Congress, the value of Federal aid for individual students has seriously eroded over the decade. Relative to the Consumer Price Index, the maximum Pell grant actually declined 13 percent in real dollars during this period and other important student aid programs have declined more sharply.

The American Council on Education has been increasingly concerned about the impact of all of this on low-income students and particularly low-income minority students—the reduced value of grant awards and the shift in emphasis of Federal aid from grants to loans.

In the past 10 years, we have seen an alarming decline in the rate of participation of our largest minority groups, blacks and Hispanics, and finding ways to improve the educational performance and participation of minority students is now the top priority of the American Council on Education. Almost 2 years ago, our board of directors authorized an initiative designed to help us regain the lost momentum of minority progress.

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[1] The document entitled "Memorandum to the 41st President of the United States," may be found in the subcommittee's files.

Working with the Education Commission of the States, and you will hear from its president, my colleague Frank Newman, later in a subsequent panel, we formed a blue ribbon Commission on Minority Participation in Education and American Life. The group was chaired by Frank Rhodes, the president of Cornell University, and former Presidents Gerald Ford and Jimmy Carter served as honorary cochairs. In May, that group issued a report entitled "One-Third of a Nation." I assume you have seen that document. I have it with me. It was a concise and straightforward report. The commission found that "America is moving backward—not forward—in its efforts to achieve the full participation of minority citizens in the life and prosperity of the Nation." It offered strategies for each major sector of American society to reverse that trend.

We're engaged in a wide variety of other programs to attack this problem, but I would like to make one thing clear. Despite increases in institutional support and a strong statutory commitment by the Federal Government to the goal of educational opportunity about which you have spoken, we are still a long way from its achievement. Several Federal student-aid programs currently authorized indicate that Congress supports broad access to postsecondary education, but we cannot reach that goal without a further budgetary commitment.

Finally, the Federal Government, the States, and institutions must develop a partnership in providing the financial resources and educational programs that will enable all our citizens to develop to their full potential. Such a partnership will produce a more competitive nation as well as one that is more decent and caring for its people.

I guess in summary, Mr. Chairman, what I'm trying to say is, I think the statutory basis is there to try to achieve most of what you're talking about, but we have not had adequate funding, particularly in recent years.

[The prepared statement of Mr. Atwell follows:]

PREPARED STATEMENT OF ROBERT H. ATWELL

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to testify at these hearings. I am speaking today on behalf of the American Council on Education. ACE is the umbrella association for the nation's colleges and universities. Our membership includes over 1400 institutions of higher education and about 200 educational associations. Later on this panel you also will be hearing from Dr. Judith Eaton, who chairs our board of directors.

It is especially appropriate that this subcommittee — and the entire Joint Economic Committee — investigate the vital role of education in the American economy, and the benefits to be gained by guaranteeing full access to preschool programs and postsecondary education for all qualified citizens. But I think it also important that you recognize the non-economic — or at least non-monetary — benefits of these programs to individuals and society, and I would like to use part of my time to comment on those.

But first, I cannot stress strongly enough the importance of higher education to the improvement of America's competitive position in the world economy. I know that you have just released the report from your hearings earlier this year on "Competitiveness and the Quality of the American Workforce," and I commend the hard work you've put in on this issue, the seriousness of your approach, and the thoughtfulness of the recommendations you've offered.

This subject has been of great concern to the higher education community. Yesterday President John Brademas of NYU spoke in his testimony of the Memorandum to the 41st President of the United States, which was prepared by the American Council on Education's Commission on National Challenges in Higher Education. That document specifically expressed our concern about the role of higher education in the future health and competitiveness of the American economy. It offered a set of clear recommendations for ways to build on the historic partnership between the federal government and the nation's colleges and universities to help revitalize the economy, expand educational opportunity, and educate Americans for an increasingly interdependent world. I am submitting a copy of that document for the subcommittee's hearing record, and would be happy to provide additional copies for individual members who may want to examine it.

Just two weeks ago, the Council on Competitiveness, of which I am a member, issued a new report entitled "Reclaiming the American Dream: Fiscal Policies for a Competitive Nation." That report also recognized the relationship between higher education and global competitiveness, and offered a comprehensive list of policy options for the federal government to remedy current economic ills and pave the way for future growth and productivity.

I won't go into detail on the specific suggestions for reducing the federal budget deficit and improving our trade posture that constitute the meatiest and most controversial part of the report — though I would be happy to provide copies for the committee if you have not received them. But I would like to cite the observation made by the authors of the report, who include the leaders of some of our foremost corporations, labor unions, and educational institutions, that "over the long term, the nation will not be able to maintain or raise its standard of living without attending to problems such as its troubled education system, deteriorating physical infrastructure and declining technological leadership."

The report recommends that the federal government expand its commitments in four areas devoted to human resources. First, the report says, "more funding is needed to help bring disadvantaged youth into the mainstream of society. Second, additional funds are needed for special programs in math and science to produce individuals qualified to operate in an increasingly complex technological society. Third, programs must be expanded to broaden access to post-secondary educational institutions. Fourth, funding is needed to retrain dislocated workers so that they can again become productive members of the work force."

Quite obviously, our colleges and universities have an important stake and an essential role in each of these areas. Economic competitiveness simply cannot be maintained or improved without additional investment in higher education.

However, I would point to other strong reasons besides competitiveness for the nation to extend educational opportunity to a broader spectrum of our citizens. Economists may debate whether the benefits of education redound primarily to the individual or to society, but, in the words of Henry M. Levin of Stanford University:

". . . education represents the dominant path for social mobility in our society, particularly as other routes for attaining higher occupational status and income have been closed off. . . . [Reduction of government subsidies to education would be] particularly troublesome at a time when the higher education system has just opened up to the less advantaged."

Debate over the relative benefits of higher education to the individual versus those to society also tend to ignore its contributions to societal change, the preservation of our cultural heritage, and the advancement of knowledge through research and public service. The most comprehensive study of the individual and social value of American higher education was conducted by the distinguished economist Howard R. Bowen. The conclusions of his landmark Investment in Learning, issued in 1977 by the Carnegie Council on Policy Studies in Higher Education, were as follows:

"First, the monetary returns from higher education alone are probably sufficient to offset all the costs. Second, the nonmonetary returns are several times as valuable as the monetary returns. And third, the total returns from higher education in all its aspects exceed the cost by several times. In short, the cumulative evidence leaves no doubt that American higher education is well worth what it costs."

Our current federal student aid programs were developed over the past three decades to help achieve the national goal of equal opportunity. There is no question that they have served this purpose effectively.

In the 1950s, before the federal role had been established, only about 40 percent of low-income high school graduates with good academic ability went on to college. Today, after three decades of federal assistance, about 60 percent of these students attend college.

While this is major progress, it also represents a substantial remaining opportunity gap that challenges our nation. When you break down the figures on participation, you find that about 90 percent of high-income high school graduates with good academic ability go on to postsecondary education. And these high-income students are much more likely to persist and earn a baccalaureate than students with comparable ability but fewer financial resources.

It is clear that the federal government must take the lead in closing the opportunity gap. Federal student aid programs today provide 75 percent of total student assistance funds, including the value of federally-insured loans. Institutional aid accounts for about 19 percent, and the states provide the remaining 6 percent.

It also is clear that the federal effort to meet the goal of postsecondary opportunities has faltered during the 1980s. While funding for the programs has increased 28 percent, the value of federal aid for individual students has seriously eroded over the decade. The Pell Grant maximum award, which represented 40 percent of total average college costs in 1980, provided only 28 percent in 1988.

Relative to the CPI, the maximum Pell award declined 13 percent in real dollars during this period. By the same measure, other important student aid programs have declined more sharply: Supplemental Educational Opportunity Grants by 21 percent; College Work-Study by 26 percent; Perkins Loans by 57 percent; and State Student Incentive Grants by 38 percent.

The American Council on Education has been increasingly concerned about the impact on low income students, and particularly low-income minority students, of the reduced value of grant awards, and also of the shift in emphasis of federal aid from grants to loans. In the past 10 years, we have seen an alarming decline in the rate of participation of our largest minority groups — blacks and Hispanics — in higher education. This trend is even more alarming because these groups constitute an increasing proportion of the nation's population — and its work force.

Currently, 20 percent of American children under age 17 are members of minority groups. By the year 2000, one-third of all school-age children will be minority students. And between now and then, minority workers will make up one-third of the net additions to the U.S. labor force. By the turn of the century, 21.8 million of the 140.4 million people in the labor force will be non-white.

Finding ways to improve the educational performance of minority students and to broaden their participation in higher education is now the top priority of the American Council on Education. Almost two years ago, our board of directors authorized a minority initiative designed to help us regain the lost momentum of minority progress. This has involved a wide range of activities.

To push this topic to the top of the agenda of college and university presidents, our annual meeting this past January focused primarily on issues of minority participation, and these issues also will be a major focus at our meeting next month.

Working with the Education Commission of the States, we formed a blue-ribbon Commission on Minority Participation in Education and American Life. The group was chaired by Dr. Frank Rhodes, the president of Cornell University, and former Presidents Gerald Ford and Jimmy Carter served as honorary co-chairs. The commission included 37 leaders from business and education, former cabinet members, and state and local elected officials, and in May they issued a report entitled "One-Third of A Nation."

The report was concise and straightforward. The Commission found that "America is moving backward — not forward — in its efforts to achieve the full participation of mionority citizens in the life and prosperity of the nation," and it offered strategies for each major sector of American society to reverse that trend. I have submitted a copy of the report for the record.

To help renew and strengthen higher education's efforts to increase minority recruitment, retention, and graduation, in July ACE, along with the American Association of State Colleges and Universities, sponsored a working conference on "Educating One-Third of A Nation." The conference drew over 500 representatives from more than 120 institutions. Participants used the three days to compare programs now in place at different campuses and to work as teams to come up with new plans for their own institutions.

Other activities currently are under way or are planned to continue this initiative. Early next year we will issue a handbook for colleges and universities that will provide practical guidance and numerous examples to help colleges and universities make their campuses more hospitable to minorities and develop effective strategies to recruit and retain greater numbers of minority students, faculty, and administrators.

We also will be issuing a study sponsored by the Mellon Foundation that will identify and evaluate those university programs that are granting above-average numbers of doctorates to blacks, Hispanics, and American Indians.

Because a large percentage of the minority students enrolled in higher education begin their experience at the community college level, we are sponsoring an articulation project designed to promote more effective transfer programs to baccalaureate degree-granting institutions. Pilot programs involving four community colleges were begun this fall.

That is a brief summary of what in truth is a very extensive program. But let me make this abundantly clear. Higher education leaders are committing their time and energy — and their institutional resources — to expanding opportunities, not only for minority students, but for all citizens. The latest figures show that between 1984 and 1986, institutions increased financial aid awards from their own sources by 22 percent — almost twice the average tuition increase and nearly four times the rate of inflation for that period.

However, despite this increase in institutional aid and a strong statutory commitment by the federal government to the goal of educational opportunity, we are still a long way from its achievement. The several federal student aid programs currently authorized indicate that Congress supports broad access to postsecondary education, but we cannot reach that goal without a further budgetary commitment.

The federal government, the states, and institutions must develop a partnership in providing the financial resources and educational programs that will enable all our citizens to develop to their full potential. Such a partnership will produce a more competitive nation, as well as one that is more decent and caring for its people.

Representative SCHEUER. You think it's mostly a funding problem and that if we simply sank more money into the present system of Pell grants and what not, you'd have universal access to postsecondary education?

Mr. ATWELL. I think the Federal statutory framework is, to a large extent, there. What we've seen is an erosion of the funding base along with the lines I've talked about, and the most alarming thing of all is the shift from grants to loans during the past 8-year period.

Representative SCHEUER. Now the Pell grants provide a maximum of what, 50 or 60 percent of the total costs of going to college?

Mr. ATWELL. Well, it would be less than that in many institutions. You have a maximum award of in the $2,200 to $2,300 range, and you have institutional costs that far exceed that in the private sector and much of the 4-year public sector far exceeds that as well. So the maximum Pell grant award is not sufficient either, and it has fallen relative to inflation.

Representative SCHEUER. Well, let's talk about the 40 percent of the talented kids from low-income families doing good work in high school. Those are the kids we want to move into postsecondary education.

What would we have to do to restructure the system so that it served that group? Would we simply have to raise the limits on Pell to 70 or 80 or 90 percent of the total cost or 100 percent of the total cost?

Mr. ATWELL. I think there's several issues here. One is the academic preparation of those students and its adequacy for their participation, and I think the remedial efforts that institutions have to engage in is one issue, but I think——

Representative SCHEUER. Now, wait a minute. I'm just addressing the kids from low-income homes who are doing well in high school.

So let's engage in a process of creaming. OK. Those are the kids who are really learning readily, they're college ready. What would we have to do to move them smoothly into postsecondary education?

Mr. ATWELL. I think we have to stop loading them up with loans in the freshman year and even in the sophomore year. That's a deterrent. I think it has been demonstrated that the loan burdens or the prospect of loan burdens or the perception of loan burdens is a deterrent to these kinds of students.

Representative SCHEUER. Well, that's a question I don't want to ask you about now, because I'm going to ask it of the whole panel.

Is the loan a psychological turnoff for the very families that you want to reach, the low-income families, the majority families, black and Hispanic families for whom borrowing tens of thousands of dollars may not be a part of their culture.

Don't answer it, Bob.

Mr. ATWELL. OK.

Representative SCHEUER. Let's ask everybody later on. OK? I don't want anybody to feel we have exhausted the subject from any one person answering.

Are you finished with your testimony?

Mr. ATWELL. Yes, sir.

Representative SCHEUER. It was a marvelous, very thoughtful piece of work. I had never heard that 40 percent of the kids of impoverished families who were doing well in high school weren't able to make it to college. And of the 60 percent who do make it to college, a significantly smaller percentage of them graduate than the kids with equal intellectual ability and equal commitment who come from well-to-do families. That's wrong, too. That is a moral imperative for our society to address.

Thanks for that fine testimony.

Now, Mr. Michael Dertouzos—am I pronouncing it right?

Mr. DERTOUZOS. Yes, sir.

Representative SCHEUER. Michael Dertouzos came to the United States from Greece as a Fulbright Scholar.

Mr. DERTOUZOS. Yes.

Representative SCHEUER. Marvelous. In addition to directing the Laboratory for Computer Science at MIT, Mr. Dertouzos is chairman of the MIT Commission on Industrial Productivity, established to find out why U.S. productivity growth is weak and to make recommendations for correcting these problems.

We're delighted that you're here, Mr. Dertouzos.

STATEMENT OF MICHAEL L. DERTOUZOS, DIRECTOR, LABORATORY FOR COMPUTER SCIENCE, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA

Mr. DERTOUZOS. Thank you, Mr. Chairman, I'm not going to read my prepared statement. I would like to start by congratulating you on an educational matter. When I said hello to you, you recited to me several verses in ancient Greek, and I'm very impressed, but at least in these chambers——

Representative SCHEUER. The opening lines by which Herodotus——

Mr. DERTOUZOS. Yes.

Representative SCHEUER. The lines by which Herodotus opened every chapter, saying, we got up, we traveled so many parasangs, so many stopmuses and arrived safely.

Mr. DERTOUZOS. Right. So at least in this chamber, the educational problem may be smaller. [Laughter.]

Mr. Chairman, the only new thing I can bring here, I think, is some of the discoveries of the MIT Commission on Industrial Productivity which link education with the economic environment and address some of the narrower issues of costs that you wanted.

We put together 16 of our best people at MIT and for 2½ years we beat the path to three continents, to 400 interviews with 30 staff and we did something that most competitiveness and productivity studies do not do. We studied the problem bottom up. We went inside the industries. We went inside the companies. We looked at the factory floor. We looked at the chief executive's office. We did not significantly look at the macroeconomic aspects of the economy as a black box, and we did not bother with fiscal, monetary, and regulatory policies, which is usually the way that this matter is addressed.

The findings from this rather large study will be published in a book entitled "Made in America: Regaining the Productive Edge," which will come out of the MIT press in May. The book is largely finished now, and so I can report partially on the results.

I think the first point I want to make is that there is no widespread understanding—in fact, there is very little understanding in this Nation, in our corporate environment and everywhere else, about the link between education and economic survival, and I make this point in my testimony. We understand the link between defense and physical survival. The link between education and economic survival we do not understand, yet it is equally as strong as the other one.

Representative **Scheuer**. Do you just want to state it, so that it stands on the record?

Mr. **Dertouzos**. Well, I have a way to excite you about it, a slightly theatrical way. Imagine a United States surrounded by very competitive neighbors who are better armed, and suppose that also this nation has a federally managed and well-funded educational system, centrally managed, but a weak and declining military capability, which is administered independently by thousands of local communities. Now that sounds tragic. I mean, it sounds like we're about to go down the tubes, but if I replace the word "education" with "defense" and "defense" with "education" in this theatrical statement, it becomes reality.

Imagine a United States surrounded by very competitive neighbors who are better educated than we are. Suppose further that this nation has a federally managed and well-funded military capability but a weak and declining educational system, administered independently by thousands of local communities.

I think the fact that we tolerate the second statement and we find the first one abominable, shows what I'm saying, that we do not understand the link.

Now I can give you lots and lots of statistics—I'm sure you have them. The one sentence about the state of education in this nation that we confirmed is that we're doing badly at the K through 12 level; we're doing worse at the prework level, what we call the forgotten half, 20 million-some people after high school and before work. And we're doing exceedingly well at the university level—in terms of productivity, the impact of educational productivity.

Continuing, if we look at the impact of this undereducation that we have today on performance, it's rather substantial. We found, for example, that in the new manufacturing systems which are becoming more and more widespread, the flexible manufacturing systems, we found a difference of 10 to 1, 10 to 1, 1000 percent, between Japan and the United States in the use of identically the same flexible manufacturing systems. They are producing 10 times more parts than we are, using the same manufacturing systems. This is attributed entirely to the skills and education of the work force. We found that though we spend in industry $180 billion for education, that this amount goes mostly for remedial activities and very little toward retraining. So we have tremendous weaknesses also in our industries in retraining.

You addressed earlier that we spend $160 billion on electronics in this Nation, and you may know that 20 years ago, we made most of those electronics here, more than 85 percent. Today we make 4 percent of the consumer electronics.

Representative **Scheuer**. We don't produce a single television tube.

Mr. **Dertouzos**. Well, we don't produce a VCR, a TV, and transistor radio, yet we invented all three of these things.

Representative **Scheuer**. Yes.

Mr. **Dertouzos**. And part of our problem here, in fact, a very large part that the commission discovered, is attributed back to the education.

Now let me address the three future trends: internationalization of the economy, increasing sophistication of the consumer and increasing pace and importance of the technology in the manufacturing process. These are the three dominant trends that we expect in the future.

All three, I was going to say, demand a better education than we have today.

Representative **Scheuer**. You mention that there's a very small list of key obstacles to improving productive performance in the United States.

Sometime in your testimony will you tell us what they are?

Mr. **Dertouzos**. The obstacles to what, sir?

Representative **Scheuer**. You say there's a very small list of key obstacles to improving productive performance in the United States.

Mr. **Dertouzos**. Yes, I will. I will do this right now, if you like, permit me to get it out from a different part.

Representative **Scheuer**. Surely.

Mr. **Dertouzos**. After conducting all these interviews and doing the bottom-up analysis, we found six factors that are responsible for the plight we're in productivitywise. I presume that this is what you would like to hear.

First is the pursuit of outdated strategies, of which parochialism and mass production are at the helm. We are focusing on a mass production system in this country which is outdated, the Fordist system. The rest of the world has moved to a highly flexible individual small niche production system.

Representative **Scheuer**. When you say "small niche," are you referring to the product or the productive system?

Mr. **Dertouzos**. I am referring to the customization of the product, smaller runs of products better tailored to the customers. And I am referring to increasingly more sophisticated products.

Representative **Scheuer**. You're referring to the product?

Mr. **Dertouzos**. Yes.

Representative **Scheuer**. Not the system by which we produce the product.

Mr. **Dertouzos**. I'm coming to that in a minute.

The second weakness that we found was short-time horizons, pervasively. I remind you again, Mr. Chairman, we're not wrenching these things out of our gut. We are reporting from 400 interviews and studies. So this is discovery. Short-time horizons—you mentioned the electronics industry—unbelievable things. Companies that were great, expert in electronics, turning around and buying automobile companies and finance companies and losing their expertise, not sticking to their knitting. Bonuses going for the next quarter, and on and on and on. A tremendous preoccupation in a hepped up way.

Representative SCHEUER. The inability of our banking community to finance a long-term process or product or system that might take 10 or 12 or 15 years to produce.

Mr. DERTOUZOS. I should say that the cost of capital, which is higher in this country than in Japan, is a significant factor in that, but we have found factors beyond the cost of capital that are just as significant.

Representative SCHEUER. Well, the inability of bankers to look forward and to say this is a legitimate product or service or system, and it's going to take 10 years before it shows a profit, and then it will show a very, very satisfactory profit, and we'll finance you.

Mr. DERTOUZOS. Proceeding with the third item, that concerns the process. We overinnovate on products, and we underinnovate on processes.

The fourth factor we found was the neglect of human resources, and that's the one that we're addressing here today.

Representative SCHEUER. Right.

Mr. DERTOUZOS. The fifth factor is a lack of cooperation. We found a lack of cooperation within our companies, interdepartmentally, across our companies with suppliers and customers, and significantly, among competitors in setting standards. We lost the machine tool business to that, and we're now in trouble with the information networks, because we cannot agree on standards.

Representative SCHEUER. Lack of cooperation.

Mr. DERTOUZOS. Correct.

Representative SCHEUER. Well, I'm going to ask all of you later when we get through everybody's testimony, whether you think that some changes in the antitrust laws might be indicated, to foster cooperation in the future, which might be illegal now.

Mr. DERTOUZOS. We did not find any particular set of laws as damaging today. We found a general mismatch between government and industry, almost as if government was operating from a different agenda from what industry wanted to do, but no significant culprit. Antitrust laws, as you know, have been revised somewhat, and they've been more helpful recently.

If I may return to my testimony, the point I want to make, Mr. Chairman, is that——

Representative SCHEUER. You finished that very small list of key obstacles?

Mr. DERTOUZOS. Yes.

Representative SCHEUER. Good.

Mr. DERTOUZOS. I wanted to make the point that it is terribly significant that we understand this link. It is far more grave than what we think, even in your charge to us, to address lengthening this ship in front and in the back, the ship of education.

Representative SCHEUER. Right.

Mr. DERTOUZOS. While we're addressing this narrow issue, the ship is heading toward a major iceberg. And if you permit me, I'd like to address a little bit the situation.

To me, there is no question that there must be a substantially greater Federal help, financially, including the narrow instance that we're addressing here today and a greater quality control, centrally administered quality control.

In terms of quantity of funds, the GI bill is a minimum, from my point of view. We look at the cost-benefit analysis, and let's look at the costs of the GI bill. That's the least we can do today, in terms of funds, putting new funds into the educational system, federally, so as to improve the productivity of future citizens. We are trying to assess how much money to put. The GI bill funds, what we committed in that area, is an absolute minimum. I think it might be revolutionary, but we are spending a lot of money. We're spending it locally today, and if we can somehow steer some of that funding more centrally, and some of the control more centrally.

In particular, every nation other than the United States seems to have examinations at the 6th grade, at the 12th grade. Why can't we have something like this here?

Representative SCHEUER. Well, you know, we couldn't do it as a mandatory thing. You'd have an absolute firestorm of protest across this country. So we couldn't do it with a stick, but we might do it with a carrot. You know, we tell States that they have to restrict their driving speed to 55 miles an hour, but we really don't tell them they have to do that. We'll tell them, we're going to give you this benefit, but in order to get this benefit, you have to reduce driving speeds to 55 miles an hour. There are all kinds of things that the Federal Government induces, cajoles States to do that we don't have the constitutional right to force them to do, but we dangle these little goodies with these incentives, and we say, if you want these little goodies, then please help us out and do this.

Mr. DERTOUZOS. In particular, universities can have slightly higher entrance requirements or industries can have different requirements.

In the fast food industry, Mr. Chairman, the cash registers are modified to have pictures on them instead of words. This caters to an undereducated work force rather than calling for a better education. And we do a lot of this in our industry also.

Representative SCHEUER. Well, you gave us a couple of examples here of how industries will remake a product and repair a product——

Mr. DERTOUZOS. That's correct.

Representative SCHEUER [continuing]. Rather than train the workers to do it right in the first place.

Mr. DERTOUZOS. That's right. We go along with the problem, we reinforce it.

Representative SCHEUER. We go along with it, and the great flaw of that is that we don't remake the product. And then we turn out cars that maybe have 5 or 10 times the number of returns to the sales showroom for service as our foreign competitors do.

Mr. DERTOUZOS. So, Mr. Chairman, in closing, I want to add that it is exceedingly important that we apply corrective action centrally, expediently, that this action be in the tens of billions of dollars per year rather than just a small action. A National Productivity Education Act might be a way to handle this. You know a lot better than I do how to do it.

But the order in which we need help, sir, is K through 12 education, first. Vocational and prework training, second. On-the-job training, third. And university education, last. From the point of view of what we discovered in our commission.

Representative **Scheuer**. Now did you address yourself to extending the school system down, preschool education?

Mr. **Dertouzos**. Right.

Representative **Scheuer**. Was that No. 2 in there?

Mr. **Dertouzos**. No, I said from K through 12.

Representative **Scheuer**. Yes.

Mr. **Dertouzos**. Kindergarten through 12.

Representative **Scheuer**. Now, improving K through 12.

Mr. **Dertouzos**. Right.

Representative **Scheuer**. And let me say that our report—I don't know if you have received a copy of it——

Mr. **Dertouzos**. Yes, I have.

Representative **Scheuer**. It exclusively is devoted to improving K through 12.

Mr. **Dertouzos**. And we want to add our voice to that, after all this discovery.

Representative **Scheuer**. Yes, of course. Today we're talking about extending the school situation down 2 years and up 4 years.

It pains me to hear people say, well, we have a hell of a lot of work to do in improving K through 12. We know that. That's what the first 9 days of hearings were about. And we think we made some useful suggestions.

Well, thank you very much for your testimony. I'm going to have some other questions for you as soon as we finish.

[The prepared statement of Mr. Dertouzos follows:]

PREPARED STATEMENT OF MICHAEL L. DERTOUZOS

Mr. Chairman, members of the Committee, I am Michael L. Dertouzos, Professor of computer science and electrical engineering at MIT and Chairman of the MIT Commission on Industrial Productivity. My testimony is based on the findings of this Commission and on my personal experience during the past 25 years as educator, consultant to government and industry, and chairman of a high technology company.

Imagine a U.S. surrounded by very competitive neighbors who are better armed. Suppose further that this nation has a federally managed and well funded educational system but a weak and declining military capability administered independently by thousands of local communities.

This imaginary U.S. sounds doomed and heading toward inevitable catastrophe. But let us repeat the statement after interchanging education and defense:

Imagine a U.S. surrounded by very competitive neighbors who are better educated. Suppose further that this nation has a federally managed and well funded military capability but a weak and declining educational system administered independently by thousands of local communities.

To most people, this real U.S. may sound somewhat troubled but certainly not doomed!

The reason we perceive the imaginary case to be worse off than the real one is because we understand the link between defense and physical survival much better than the link between education and economic survival.

The main point of my testimony is precisely this -- that the relationship between education and economic survival is already significant and will become increasingly more important in the future. My second point, also rooted in this defense-education analogy, is that the federal government must help straighten out U.S. education. The alternatives are not working and cannot apparently pull us out of a slide that is threatening this nation's future ability to compete in the global marketplace.

Education and Productivity

Unlike many other productivity studies that delve into macroeconomic fiscal and regulatory issues, the MIT Commission's work focused on a bottom-up assessment of eight industries representing about a third of the U.S. manufacturing sector. Eight teams led by Commissioners, some 60 people in all, conducted several hundred visits to companies spanning three continents. Our purpose was to find out why the U.S. has developed a weak productive performance relative to other nations. In other words, why our productivity is growing more slowly, why we have lost significant market share in textiles, steel, automobiles and other sectors, and why even though we are great innovators, we have trouble producing high-quality products rapidly and at comparable cost with our competitors.

The Commission has concluded that the pervasive failure of American industry to develop and utilize human resources fully and effectively at all levels of the work force is one of a very small list of key obstacles to improved productive performance in the United States. This neglect of human resources is apparent in both the troubled state of American education and the limited opportunities for participation and learning available to workers in industrial firms.

Space does not permit me to go here into the detail that this finding deserves. Since our report, entitled "Made in America: Regaining the Productive Edge," will be published by the MIT Press in late Spring 1989, I will limit my remarks to a telegraphic summary of that study:

1. Primary and secondary education in the U.S. has been described as more like that of a developing than an industrial nation. In science achievement, American ten-year-olds placed eighth out of 15 countries surveyed[1]. In mathematics, U.S. eighth graders placed between 8th and 18th among 20 countries surveyed. In a National Geographic magazine survey, American 18- to 24-year-olds scored lower than all their counterparts in 8 countries surveyed.[2] Dropout rates are unacceptably high. And there is no fundamental relief in sight. Overall, U.S. primary and secondary education does not prepare the citizenry for productive careers in a world of mounting international competition.

2. Preparation for work. Our schools are failing to produce workers with the skills necessary to perform well in modern production systems. Unlike other countries, the U.S. has a serious gap in pre-employment training for its 20 million 16- to 24-year-olds. This "forgotten half" is left to make it in the world of work without the knowledge, credentials, connections and assistance that benefit college graduates. High school vocational education, though it has been supported by the federal government and enrolls some five million students, has a very disappointing performance record and cannot be considered a viable pre-employment training system.

3. Colleges and universities. Here, we are generally doing well, and our higher education system is neither part of our educational problems nor a threat to our economic viability. Our universities are the envy of the world, and our community colleges fill some of the vocational gap discussed above. Yet,

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[1] John Walsh. "U.S. Science Students Near Foot of Class." Science. 11 March 1988. p. 1237.

[2] Crispin Campbell. "What in the World Do We Know?" Boston Globe. 28 July 1988. p. 2.

there are young people capable of obtaining a college education who are unable to do so because of financial difficulties.

4. On-the-job training. Funds spent by employers for formal and informal training in the workplace are estimated to be comparable in size to the total expense for primary, secondary and college education[3]. These expenditures, however, are unevenly distributed and involve a good deal of remedial basic education. U.S. on-the-job training is narrower and does not involve frequent job rotations and a consequent mindset for change and learning as do the German and Japanese systems. The U.S. is also deficient in re-training dislocated workers, relative to other countries like Sweden and Japan. Overall, American industry has systematically underinvested in training, and its commitment to broad work force training remains relatively limited.

Impact On Performance

The impact of this under-education on performance is substantial. For example, pervasive use of flexible manufacturing systems (FMS) in the U.S. produces only one-tenth the number of parts made by the same systems in Japan, primarily because of differences in skill level and preparation of the work force in each country. Moreover, only 8 percent of the FMS workers in the U.S. are engineers, compared to 40 percent in Japan; and training to upgrade the skills of FMS workers' skills in Japan is three times longer than in the U.S.[4]

The MIT Commission has found many similar instances where the consequences of undereducation become starkly visible in the context of a changing business world. For example, one such case involves the choice of the automobile industry to rework defective products rather than upgrade worker skills and push for greater perfection in production. Another case arises in textiles, where the massive recent investment in technology has made obsolete the old system of recruitment and advancement that was originally geared toward a less educated work force.

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[3] Anthony Carnevale and Harold Goldstein. Employee Training: Its Changing Role and an Analysis of New Data. Alexandria VA: American Society for Training and Development, 1983.

[4] Ramchandran Jaikumar. "Post-Industrial Manufacturing." Harvard Business Review. November-December 1986.

Looking ahead, the MIT Commission sees an economic world that is becoming progressively more dependent on technology and on knowledge of international tastes, practices, and opportunities. To compete effectively in this world, nations and their business enterprises must value and utilize this new knowledge, hence they will need to draw on a work force that is better educated at the basic level and that is more technically and internationally knowledgeable.

The MIT Commission also found that in today's best-practice firms, employees are assuming a broader and greater responsibility in their company's affairs, thereby achieving a more productive performance. We expect this trend to continue and diffuse throughout our firms. This, in turn, means that tomorrow's workers at all levels will have to be more and better educated so as to cope with these increased demands. The old Fordist model of a worker doing mindlessly but efficiently the same repetitive job all day long is largely over in tomorrow's sophisticated environment of flexible manufacturing systems and tailored niche products. This shift calls for better educated people if the U.S. is to compete and survive in an increasingly knowledge-intensive world arena.

Role of the Federal Government

As a European turned American, I am appalled by the uniquely American practice of floating primary and secondary education much like a commodity to be handled by local communities, as they see fit. This practice, taken together with the national orientation toward the short term (another finding of the MIT Commission) is, in my opinion, an invitation to the educational troubles that the U.S. is facing today. Returning to the defense/education analogy, would we ever contemplate floating our national defense in the same way – letting each community decide the amount and quality of the nation's military capability? Yet, both defense and education are equally and critically important to our national survival. Both cost a great deal of money and both can benefit from the strength, stability, and scrutiny of a united front.

Lest you fear that I am about to recommend complete nationalization of U.S. education, I will not, mostly because it is impractical, at least at this stage of the nation's educational plight. I recognize the hoped for benefits of a decentralized educational system that is resonant with the long-standing American tradition of local self-determination as opposed to centralized intervention. But I regret to observe that the system as it now stands is simply not working! I do, therefore, recommend along with many others, and in the strongest possible terms, that the federal government help improve U.S. education with a greater degree of federal help and quality control. The need is paramount if we are to survive economically.

Even if we were to ignore every good thing educational in the centralized approaches of nearly all other countries, we have domestic evidence that federally sponsored major educational bills can make a big difference. If I am not mistaken, the G.I. Bill helped some 17 million Americans become better educated; and even though it focused on university education, it had a big impact on the whole nation. This number too is impressive because it is comparable in size to the "forgotten half" floating today between high-school and the workplace. That successful legislation gives us an idea of our current costs and consequences that we may now wish to apply to our current educational needs. It also suggests that if we are to succeed, we must be prepared for some sizable spending and, hence, for sacrifice.

I suggest that the principal goal that we as Americans should strive to achieve through increased federal assistance is **improved**

education toward greater productivity and, hence, toward economic survival. The term productivity is used here in its broadest sense pertaining to work performed from the office to the factory floor by all levels of the work force.

Congressmen, I am nowhere near your level of political sophistication and cannot, therefore, expertly recommend the policy instruments that we need to achieve this goal. Besides, I believe that all of us respond better to broad strategic directions than to detailed and prescriptive recommendations. Nevertheless, I shall venture a couple of suggestions.

Perhaps what we need is the National Productivity Education Act of 1989, a broad and comprehensive piece of new legislation that would offer everyone that could be potentially productive the opportunity to become educated toward that purpose. The beneficiaries of this bill would be K-12 education, vocational and other pre-work training, retraining and on-the-job training, and university education, presented here roughly in order of decreasing need. The purpose of the bill would be to help increase the future productive performance of Americans at all levels of work. I am sure that the specifics of such a bill could be worked out if the will were there.

Another possibility is the use of federally controlled examinations at the end of perhaps the 6th and 12th grades. Such tests would ensure that the substance of what is taught and learned meets acceptable levels. Some "rewards" and "sanctions" on schools may have to follow the results of these tests to insure effectiveness. And perhaps even a portion of the taxes now paid locally for education could be shifted to the federal level to help the balance of educational authority and responsibility among central and local agents. I realize that the concept of centralized tests is distasteful and alien. Yet it seems to work well in Japan, Korea and in most nations of the European Economic Community.

To summarize, with our productivity and competitiveness badly in need of a boost, with our education in a terrible and declining state, and with the already strong link between education and economic survival becoming progressively more important, I urge you to act centrally, forcefully and expediently.

Representative SCHEUER. Now we'll hear from Ms. Judith Eaton, president of the Community College of Philadelphia, and Chairwoman of the American Council on Education.

Ms. Eaton has been president of the Community College of Philadelphia since 1983 and before that she was president of Clark County Community College. She has served in a variety of capacities and has written extensively on the challenges facing community colleges.

We are delighted to have you here, Ms. Eaton. Please proceed with 5 or 6 or 7 minutes, liberally interpreted.

STATEMENT OF JUDITH S. EATON, PRESIDENT, COMMUNITY COLLEGE OF PHILADELPHIA, AND CHAIRWOMAN, BOARD OF DIRECTORS, AMERICAN COUNCIL ON EDUCATION

Ms. EATON. Thank you, Mr. Chairman. It's a pleasure to be here. It's also a pleasure to hear you speak to the Truman Commission Report, because that document was, of course, critical in the launching of the Nation's 1,200 community colleges, and those institutions more than any other single sector of higher education serve low-income and minority students. The issues that are before us are, indeed, real on a day-to-day basis to a person such as myself.

Representative SCHEUER. So in other words, when the Truman Commission Report recommended that we extend the school, the normal predictable school careers up, it really happened to a significant degree——

Ms. EATON. I would say yes.

Representative SCHEUER [continuing]. At that time.

Ms. EATON. Yes.

Representative SCHEUER. So I hope in your testimony you'll tell us to what extent the 2-year community college experience is available to and accessible by low-income minority kids who have proved in their secondary experience that they would benefit from it and would value it.

Has that proved an adequate answer?

Ms. EATON. It has proved an answer in part, but not fully adequate.

Representative SCHEUER. Well, I don't want to interrupt your testimony. Refer to that sometime in your testimony, please.

Ms. EATON. All right. In terms of the issue of expanding access, you raised the question earlier, is it a funding problem. The answer I would offer you is yes, in part. It is also an attitude value problem. It is also a structural problem, as has already been suggested, both at the K through 12 level and at the higher education level.

I'd like to make, in that context, several points about access. I think years ago access was perceived as a challenge, an exciting challenge in our nation. I think it's becoming to be perceived as a problem, and I'm very much concerned about it.

Representative SCHEUER. Now wait a minute. Would you elaborate on that? I don't quite understand that.

Ms. EATON. We looked at access as an opportunity——

Representative SCHEUER. You mean access is a problem because there isn't full access, isn't complete access?

Ms. EATON. Yes, and in part because we haven't, in addition to saying education will be available, in my view, insisted on achievement as characteristic of access.

Representative SCHEUER. You're talking to a Member of Congress from New York City who has watched the sad process by which CCNY was converted from one of the glorious centers of intellectual excellence in our country to a remedial high school. They are on the way back, but that's, I think, a fair statement of the process that took place.

Ms. EATON. I think that's one of the critical issues before us, what we mean by access, what is successful access.

The longstanding Federal commitment to access is, in my view, currently frustrated by two factors, not only inadequate funding, I think that's clear, but the changing student demographics, changing student values and the changing student culture. It seems to me that we're still operating many schools, whether K through 12 or colleges and universities in a fashion that may have been more effective for generations ago than today's students.

I think as a result of these conditions, the Federal commitment to access, however unintentionally, has diminished, and we have come to rely, I think, on funding two major kinds of activities. One is the enabling of some students to spend more on tuition rather than less. That is, I think we've come to fund choice more than access, again, however, unintentionally, in the society.

Second, I think that we find ourselves engaged in training programs in place of education. We're allowing students to substitute short-term educational goals for long-term educational efforts. I'm not opposed to the training effort at all. I am concerned when the training effort is considered to be equivalent to the comprehensive educational effort.

Increasingly, there are those for whom financial assistance is the difference between access to education and no education at all, and it is that group, Mr. Chairman, in my view, who are becoming a smaller and smaller number of people in the access story. That is, we've lost an entire class of students—low-income students, minority students, people for whom support is not available to seek educational opportunity.

Representative SCHEUER. Is this the 40 percent of the kids in secondary school who are doing well?

Ms. EATON. Yes.

Representative SCHEUER. Who don't have the financial wherewithal to go on to college, that Bob Atwell was talking about?

Ms. EATON. Yes. Specifically that group. We see declining participation rates. We see lower transfer rates as compared to the general student population. We see greater difficulty in achieving academic goals, and in part, this is the unfortunate result of unmet need in higher education.

I have several suggestions about what we might do.

First, I think that we need to insist on the centrality of access as a public policy position. It should be a fundamental value from which we consider change.

Representative SCHEUER. Equality of access.

Ms. EATON. Well, I think equality of access should be central to our thinking.

Representative SCHEUER. Yes.

Ms. EATON. I think that in a very well-intentioned way, we've attempted to attack a lot of educational issues through funding. I'm urging that equality of access be made the priority issue, the most important principle we are seeking to realize.

Representative SCHEUER. Well, I don't want to anticipate the question period, but if you say that, aren't you logically led to the principle that if you want to have real equality of access, then you make an entitlement. You extend the education system 2 years.

Ms. EATON. Well, I would say yes, not anticipating the later session, Mr. Chairman, under certain conditions.

Representative SCHEUER. I don't know why people seem to go into cardiac arrest at that suggestion. Even John Brademas responded in shock and said there's no cornucopia out there.

Ms. EATON. I think there are two reasons people go into cardiac arrest about that suggestion. One is, it's incredibly expensive, and the second is——

Representative SCHEUER. Now wait a minute. This is an investment that a cost-benefit analysis has proven to have somewhere between a 5 to 1 payoff and a 12 to 1 payoff, very conservatively computed. This is an investment—the most spectacularly attractive and productive and profitable investment our country has probably ever made in the field of education.

Ms. EATON. I agree with you, and I support your notion.

Representative SCHEUER. When you say it's expensive, this means it's an expense.

Ms. EATON. No, it means to me——

Representative SCHEUER. It's a large investment.

Ms. EATON. OK. If you want me to have 10,000 more students at my college, I need a lot more money. It's that basic to me. The investment may be well worth it, but I have to ask the question, where will the funding come to provide educational service for another 10,000 students?

Representative SCHEUER. Of course, and Congress and the new administration have to ask that question.

Ms. EATON. Yes. But that's why I say it's incredibly expensive. Second, the whole issue of how we go about determining equality of access is something we have not addressed or addressed with some reluctance. We've wanted to break down certain barriers—sex, race, class barriers, in terms of access to education. We have been reluctant to do what Mr. Dertouzos was proposing earlier, and that is, look at the ability to achieve within the educational system. We don't know enough about preparedness and underpreparedness; we don't know enough about, in all cases, how to bring students along so that they can benefit from access, and until and unless we address that issue as well as the availability issue, then we have difficulty about, we have doubts about the effectiveness of equality of access or universal access in the country.

What I'm trying to suggest is that we in education do some sorting of students, but we don't do so on a basis that is clear enough, such that we're comfortable with providing education to everyone who might seek it.

I think that if we could affirm the centrality of access, if we could insist upon the ability to achieve, then a guaranteed access program in higher education is enormously valuable and makes a good deal of sense to the Nation's future.

You asked me a question about community colleges and our specific role in the access area.

Representative SCHEUER. Yes.

Ms. EATON. Community colleges in this country are open admission institutions. Generally, that means if you have a high school diploma or a GED, or even if you're 18 years of age or older, you may enter the institution and you may pursue course work of a credit or noncredit nature. What course work you pursue may vary. Many, many institutions provide a series of placement tests to suggest to students into what programs they ought to go or at what level they should undertake higher education studies. That ends my oral statement, Mr. Chairman.

[The prepared statement of Ms. Eaton follows:]

PREPARED STATEMENT OF JUDITH S. EATON

Mr. Chairman and Members of the Committee:

We know what access to education means in human terms. It speaks to our hope for a better life and our faith on an individual's capacity to succeed. It reinforces our faith in democracy and an open society. It encourages us to be resourceful and energetic. It helps build a vibrant society.

When we are confronted with the denial of access to education, we are faced with ugliness. We see ordinary people lost to a decent life. We see violation of human dignity. We see despair. Worse, we see that those among us who are denied access to education are disproportionately poor, not white, and female.

We have cherished education in our society. We have prided ourselves on our national capacity to create success, security, and stability for those who will use education as passage to a better life. Why are we allowing ourselves to lose that which we have regarded so highly?

Access was once perceived as an opportunity and a challenge. Sadly, it is increasingly perceived as a problem. Whether addressing the K-12 or higher education level, we can state this problem straightforwardly. Access has encountered three difficulties:

(1) An insufficient number of young people and adults undertake an educational experience;

(2) Schools are perceived as insufficiently effective: we are dissatisfied with the skills, capacities or competencies students are able to generate as a result of access to educational activity;

(3) Our capacity for educational mobility is limited: of those who initiate educational work, too few move from K-12 to higher education. Within higher education, too few students move from lower division to upper division to graduate education programs.

Solutions to the problem of access are more difficult. There are at least two reasons for this. The suggestions generally put forward are couched in language based on essentially traditional values. We have come to see the traditional as trite and, therefore, suspect. Resolution of the problems of access require dramatic as opposed to "kinder, gentler" change--and many perceive major change to be unlikely.

Nonetheless, if we wish education at all levels to be effective (resulting in an informed and thoughtful populace, functioning as a vehicle to achieve a just and equitable society) we need to at least promulgate suggested solutions--whatever the consequences. We can hope to encourage that which we have cherished.

Too Few Students

To ensure that more among us pursue higher education, three conditions need to prevail. Students need to be ready for the work they undertake. Students need to have the financial capacity to complete the work they undertake. Students need to perceive the effort as worthwhile. On the one hand, this is obvious. On the other hand, we are confronted with unacceptable K-12 and college drop-out data. On the other hand, many remaining students are forced to work and even incur debt to achieve their education goals. On the other hand, the worth of educational activity is consistently challenged. A meaningful commitment to access sustains and enhances the conditions required to be effective. This commitment is neither easy nor short-term.

Inadequate Achievement

Effective access is more than a matter of being there. It means succeeding as well. In order to produce needed capacities, educators need to cease to use some familiar strategies and initiate others. Our educational decision to diminish the demands of the academic experience as our major response to the underpreparedness of the students seeking that experience has shown itself to be ineffective. The era of "academic welfare" should be over. It needs to be replaced with an insistence on demonstrated competencies buttressed by adequate academic support and a multi-cultural perspective.

Insufficient Mobility

Mobility within the higher education community has, for the most part, received limited attention from educators. Mobility has been defined primarily in terms of recruitment from outside the enterprise (movement from K-12 to higher education) and retention (persevering within a particular institution). We rarely focus inward on those students already undertaking a collegiate experience. For example, one million of the two million minority students in higher education are in community colleges. As the testimony from the American Council on Education clearly indicates, minority participation in higher education is its major concern. We have an important opportunity to ensure educational achievement of those already among us through expanded and unconventional approaches to articulation and transfer.

What can the federal government do? At the most fundamental level, it needs to decide whether or not it is an appropriate governmental role to comprehensively provide financial resources to ensure access. If the response is affirmative, then a significantly modified student financial aid operation is needed to ensure that funding is provided to those who both need it and are capable of using it effectively for educational purposes. The federal government can also insist on the cultural value of meaningful education for our society. It can set a tone and an agenda of demanding standards.

Thus, I suggest the following:

(1) Continue to channel federal support for higher education primarily through its student population and not its institutions.

(2) Sustain a tripartite approach to federal funding: assistance to those with some ability to pay(loans, savings programs, tax incentives), support in the form of grants for those with academic ability and unable to pay, and subsidized training (in conjunction with employers) which meets economic development needs. Many of the federal government's efforts in the past several years have resulted in realizing only two of these goals: enabling students to attend institutions with higher tuitions and job training. The government has not adequately addressed that large class of students for whom tuition financing is simply not available at all--and for whom substituting limited training goals for comprehensive career education is, to say the least, harmful. This combination of action and inaction has the powerful impact of re-enforcing social and economic stratification within the society;

(3) Realize that few additional forms of cost efficiency and effectiveness are available to the higher education community. For the most part, the price of higher education will not be greatly affected by any cost saving measures if the present scope of activity is sustained. Given a national economy which virtually guarantees annual personnel cost increases and at least a modest annual rate of

> inflation, the cost of doing business(even for higher education) should not be expected to decrease. The issue is not to insist that the higher education community develop the means to cope with annual cost increases with stable revenues and then blame them for failing to accomplish this feat. Rather, the higher education community and the federal government should be focusing on the shared responsibility of tuition containment/reduction programs essential to ensure access.

We sometimes set policy by that which we choose to ignore. This has been the case for access. We are able to assist with choice in education through some current aid programs. We assist with training. But access for those with ability and without means has received less attention. We are foolish to assume that the poor, by definition, have limited education goals. We are neglectful when we do not realize that women and minorities seek the benefits of general education for a productive, quality life.

A federal agenda, then, would make access a priority and point of departure for funding decisions. Re-evaluation of the current structure of federal financial aid programs as well as their funding levels would take place in the context of this commitment to access. This includes re-evaluation of economic development training programs. This involves the creation of a climate of opinion in which education is restored to its cherished place in our national values and in which effectiveness in education is a clear demand. All of this may or may not require additional financial revenues. All of this clearly demands additional valuing and respect for the educational enterprise and those seeking to share in its activity.

Thank you.

Representative **Scheuer**. Well, I'll save my questions until the question period.

Next, Steve Trachtenberg, who I first met 20-odd years ago when he was an aide to Congressman Brademas, a font of intellectual excellence and stimulation.

Mr. Trachtenberg was recently appointed president of George Washington University, after having served as president of the University of Hartford for 10 years. He was Special Assistant to the U.S. Education Commissioner.

Steve has also consulted with us and advised us on various aspects of these 11 days of hearings, and we are very grateful to you, Steve. Please proceed.

STATEMENT OF STEPHEN JOEL TRACHTENBERG, PRESIDENT, GEORGE WASHINGTON UNIVERSITY, WASHINGTON, DC

Mr. **Trachtenberg**. Thank you, Congressman. It would be unseemly for me not to make some reference to the fact that I spent 8 years at Boston University, given the presence here this morning of the president of that institution, under whose administration I served for half a dozen years.

I have a prepared statement which I'm going to give to the clerk for inclusion in the record, and then, frankly, I am not going to read my prepared statement, but I am going to try and answer some of the questions that I have been terribly stimulated by so far this morning.

Representative **Scheuer**. And here's one question that I want you to answer.

Mr. **Trachtenberg**. Oh, what. [Laughter.]

Representative **Scheuer**. This is no longer the mystery report. This is a Truman report, 1947, identified by one of the witnesses in the next panel.

> The time has come to make education through the 14th grade available in the same way that high school education is now available.

That was 40 years ago. We just heard from Bob Atwell that only 1 in 10 of the students who graduate from high school will have the skills that between one-half and three-fourths of the jobs that are being created between now and the year 2000 will have.

Now, we've just heard from Professor Dertouzos that with a given piece of sophisticated high-technology equipment, Japanese workers are able to get 10 times the productivity as American workers.

We read report after report after report about how workers in Europe, Hong Kong, Singapore, South Korea, Taiwan, and Malaysia are making fools of us in terms of their skills and in terms of how their young people function compared to ours.

Yet, when I repeat a recommendation that was made 40 years ago—when we were just barely into the industrial age and had a far less demanding economy—people go into cardiac arrest. This boggles my mind.

Mr. **Trachtenberg**. I think you're running into a question that the American people are troubled by, and that is the plausibility of their school systems. I think one of the problems is that what you're focusing on when you talk about extending the school system, making the box larger, without necessarily——

Representative **Scheuer**. It's a ship.

Mr. **Trachtenberg**. The ship longer——

Representative **Scheuer**. Professor Dertouzos, yes——

Mr. **Trachtenberg** [continuing]. Without necessarily addressing what's going on inside the box or on the ship, what's transpiring between the crew and the captain.

Representative **Scheuer**. Nobody knows better than you that the first 9 days of hearings were on improving the ship before we lengthen it; OK?

Mr. **Trachtenberg**. I understand. But I'm trying to be as responsive as I can to your question. We've dealt with some of that in your first set of hearings, but I think that's a partial answer. Your first set of hearings is a partial answer, certainly a preface, to the questioning of lengthening. I think there are a lot of people who say, "Look, one of the ways we can improve"—and the response I would give, in part, is one of the ways we can improve what's going in kindergarten and secondary schools and elementary schools is by focusing more dramatically on the pre-K kinds of conversations and questions that you're raising here this morning.

I most earnestly believe that the most burning issue is what happens to youngsters in the earliest portions of their lives. And if you said to me, "Trachtenberg, you must choose"—and I know when we talked about this earlier, you don't want me to say that, but I feel obliged to come back to my own passion here. If you said to me, "You must choose between pre-K programs and postsecondary programs," I would say to you, the focus has to be on pre-K programs.

Representative **Scheuer**. As a priority, there's no question about it.

Mr. **Trachtenberg**. Great. I mean I just want to kind of put my own——

Representative **Scheuer**. There are a lot of kids in our society who, if they don't get the enriched, Head Start type of experience, are not going to be learning ready when they come to school, and they're going to drop out, in the 8th, 9th, 10th, 11th, or 12th grade—but they've really dropped out in the first grade——

Mr. **Trachtenberg**. That's exactly right.

Representative **Scheuer** [continuing]. Or the second grade. When they weren't able to learn to read, write, and count along with their classmates, who come from middle-class homes that are full of education ferment in the first place, and were sent to a preschool. I hate to keep repeating this. The kids that need it the least have been getting it the most, and it's not only true for the last 20 years since the outset of Head Start, it was true since 1920 when I got a Head Start type of experience. I assure you, most of the low-income kids from impoverished families in New York City who needed it far more than I did, didn't get it at all in those days. Now at least a fifth of the kids who need it are getting it, but we ought to do far better than that. There's no question. That has to be a first priority.

Mr. **Trachtenberg**. Yes.

Representative **Scheuer**. Without that, a lot of these kids won't be ready not only for postsecondary but for secondary or primary school.

Mr. **Trachtenberg**. And my judgment is that if today we had the capacity to pass legislation and not only authorize but appropriate preschool programs, you'd find it a devilish problem to find personnel to teach in those programs.

To some extent that takes in the second piece of your question about extending postsecondary education. I think in the last 4 to 5 to 7 years, the notion of being a schoolteacher has regained legitimacy.

Representative **Scheuer**. Some.

Mr. **Trachtenberg**. Some.

Representative **Scheuer**. Not as much as it should have.

Mr. **Trachtenberg**. Some. Absolutely. And I think we're going to see an extraordinary retirement in the schools in the next several years, and that is not being sufficiently addressed in our current undergraduate enrollments. So that there's going to be a pressing need for new teachers, and we need to think more imaginatively about where the teachers are going to come from to do your preschool programs and, indeed, to man the programs we presently have.

If this morning is a place for radical suggestions, I'd like to propose that somebody give some thought to using selective service as one potential means of identifying teachers in this country. That is to say that people ought to be able to satisfy some sort of selective service responsibility or national service responsibility by spending a couple of years in our classrooms.

Representative **Scheuer**. Well, do you mean selective service—are you suggesting we ought to draft these people?

Mr. **Trachtenberg**. I'm sneaking up on that, I must tell you. I mean, I really do think that finding some device to reawaken a commitment to service to the country either through domestic or military service is something I think is worth thinking about. This is not a novel idea, obviously. It is one that's been debated as long back as I can remember, but I really do believe that there needs to be some encouragement of paying back in return for receiving. And I would not be unhappy at seeing some payback to loans and scholarships and other kinds of programs devised. Obviously, it is something that has to be done carefully and with the counsel of my betters, but I do believe that there needs to be some way of channeling some of our more enthusiastic young people into these kinds of services.

Let me move on. I think your focus on the top 10 percent is perhaps a problem, because my own sense is that there are colleges and universities through the Gene Lang program and so many others that are trying to reach out and recruit the top 10 percent of America's minority youth, and as I look around this room, and I know John Silber from Boston University, and I know from myself at George Washington University, I know that the schools that are represented by President Eaton would be delighted to bring to their classrooms the very best of America's minority youth without regard to their financial circumstances. It is when you go down another 10 percent and yet another 10 percent that the problem, I think, arises.

Representative SCHEUER. Well, I don't know where you got the 10 percent from. I was really quoting from language that Bob Atwell had in his testimony that intrigued me very much, and I had never seen it quite broken down this way. Of the low-income minority students that are doing well in high school, 40 percent cannot go on to college because of financial limitations; 60 percent apparently make it to college. But even the 60 percent who make it to college don't graduate in the same proportion as the middle-income kids who go to college, and they don't graduate because of financial problems.

Mr. TRACHTENBERG. I think it's partly financial problems and partly the nature of the precollegiate experience that they've had, that they've done well, relatively, but perhaps not absolutely, and once they get into a more competitive environment, things are dramatically changed.

Representative SCHEUER. That may well be true.

Mr. TRACHTENBERG. I think also there's a need increasingly to start to differentiate between higher education and further education. I think we need to give greater opportunities for 2 years of postsecondary experience, and we need to have——

Representative SCHEUER. Don't you call that higher education?

Mr. TRACHTENBERG. Well, I think——

Representative SCHEUER. Junior college?

Mr. TRACHTENBERG. Well, we do in this country. In Great Britain and in other countries, they don't. I don't want to open up that debate. It's an old debate, and I don't want to open it up unnecessarily this morning. But I do think what we need to do is to give more credibility and more plausibility to the kinds of programs that take place in community colleges and 2-year technical colleges, and I think there has been a downplaying of the virtues of these enterprises in much of the rhetoric about higher education.

One last point, and I will surrender the microphone.

You asked a question early on about the burden of loans versus grants. I think common sense will tell us that it is preferable to anybody, from their point of view, certainly, to get a grant rather than to have to incur a loan that requires a payback. Given that question, I think you have to say, are loans preferable, preferable to what? If you can give a student free money as opposed to obligated money, that is to say, money which comes with a commitment to pay it back, the student and his or her parents are obviously going to be more pleased. Given the alternative of no help at all, clearly the loan is better.

I think you have to ask the further question, What do we mean when we say loan? To what extent is that—when does that loan have to get paid back? What sort of interest is going to be paid? A loan that is extended out over a considerable period of time may have some virtue in building character and in making people understand that this generation has a responsibility to the coming generation and that the next generation has a responsibility to the generation that follows it.

I don't know. I mean, I read testimony about as frequently as most people. I've never really been impressed with the notion that my living was going to fall out of the sky. I didn't mind asking people for help, and God knows I got a lot of it during the course of my life. I've always tried to pay it back, and I think that building some tradition of a payback into a package provided to a student, some portion in loan, some portion in work, some portion in outright grant, has some virtue, so long as the loans do not become so large as to become onerous and become absolutely impossible for a student and his or her family.

So I guess the question I would ask is, when you say, what do you think about loans, I have to say to you, what kind of a loan, what are the responsibilities and how ought they be paid, how big ought they be and what percentage of the total package ought they be and things of this sort.

I would argue for disaggregating the questions, making them more bite size, then trying to answer them in smaller pieces.

I think I will conclude with that remark.

[The prepared statement of Mr. Trachtenberg follows:]

PREPARED STATEMENT OF STEPHEN JOEL TRACHTENBERG

It is with a sense of deep gratitude that I testify before you today--gratitude for the fact that we are finally grappling with two problems, access to preschool and access to postsecondary education in our country, that are of such critical importance to the health and competitiveness of the American economy.

We live at a moment in history when we are being counted out of the international marketplace by significantly-positioned analysts in the other industrial nations of the world. Whether the voices come from East Asia or Western Europe, they have one theme in common: that our society is too racially and ethnically divided, and too split between the well-off and the

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Stephen Joel Trachtenberg joined The George Washington University as President and Professor of Public Administration in August, 1988. Prior to that he served for eleven years as President of the University of Hartford and Professor of Public Administration and Law. Testimony before Scheuer Subcommittee on Education and Health of the Joint Economic Committee, Congress of the United States, December 15, 1988.

less-well-off, to ever organize a workforce as integrated and effective as those of our competitors. Specifically, these analysts in Asia and Europe point to our largest minority groups, Black and Hispanic, as people who are by and large cut off from the mainstream of the American economy, whether as workers or consumers. And they point to the inadequacy of the measures now being taken to try to enhance their levels of education and skill so that integration of that kind becomes less of a long shot and more of a likelihood.

What these analysts are pointing at is the sharp cleavage between a mainly white Anglo middle- and upper-middle-class...that lives a suburban existence within which high achievement is regarded as both plausible and estimable...and an inner-city underclass, mainly Black and Hispanic, for whom limited horizons and the sense of being defeated before one can fully begin one's life are the order of the day every day. What they are saying is that America's inability to narrow that gap will prevent us from creating the trained, skilled, diligent workforce that we need if our economy is once again to be a source of security for all of our citizens rather than a source of extreme anxiety. What they are strongly suggesting is that all of us will suffer from the further decline of our economy because we cannot bring ourselves to better the living conditions and the educational opportunities available to those citizens--the so-called minority groups--who will soon form a majority of the American population.

In other words, the issues being wrestled with by this subcommittee are on a level of seriousness that approaches, and may even equal or exceed, those posed at earlier stages of our history by the two World Wars, the Civil War, and our original War of Independence.

For those who live in our middle- and upper-middle-income suburbs, a culture of education is taken for granted. Families routinely see to it that their children are introduced to that culture, that they are encouraged to persevere within it, and that they are fulsomely praised as their efforts begin to blossom into satisfying and/or profitable careers. The acculturation process begins in infancy, when toys are chosen because they have been shown to enhance the baby's learning abilities. It continues as the infant is read to, and engaged in dialogue with, parents whose income-level gives them the security to focus in on the child's cognitive as well as nutritional and medical needs. It continues still further as the young child is introduced to the world of preschool, and is gradually prepared for kindergarten and first grade.

By that time the white Anglo suburban child has acquired a head start toward college, toward graduate or professional education, and toward a fully-developed career. In an atmosphere of relative financial and emotional security, the elementary school and high school years proved many opportunities for families to reinforce the fact that college and a successful career are essential priorities for the older child and adolescent.

How completely, tragically different is the picture that confronts the infants, children and adolescents who live under conditions of nearly Third World poverty in our major urban municipalities, as well as in poverty-afflicted rural areas and in older industrial suburbs that have long been in economic decline. Recent reports from New York City, for example, speak of the present decrepitude and imminent collapse of the entire municipal hospital system. When a family cannot count on elementary medical care, can it truly be expected to play a supportive and deeply committed role in the education of its children from birth to late adolescence?

The miracle, in our center-cities, is that so many Black and Hispanic parents do succeed in marshalling their limited resources on behalf of the children they love just as dearly as their suburban counterparts. But those who count on miracles for the salvation and redevelopment of the American economy, and therefore feel absolved from making a personal and collective effort that will function even in the absence of divine intervention, are trying to avoid the most relentless truth of all: that God helps those who help themselves, and that He has a somewhat jaundiced feeling toward those who refuse to do that.

Two years of preschool may be a useful option for suburban parents who have already been making good use of the home environment to prepare their infants and young children for formal education. In the inner-city environment, and in the environment of a poor rural area or older declining suburb, two years of preschool are an absolutely essential minimum which, once it is firmly established as national policy, will enable us to focus on even more urgent needs.

For the woman who is bearing a child, those needs begin at the time of gestation, continue through the nine months of pregnancy, and extend through the infant's first, second and third years.

What is taken for granted in an affluent environment must be proved by government, assisted by charitable organizations and volunteers, in environments where low incomes, high interpersonal stresses and actual physical danger are the destructive norm. Moreover, these services must be provided as close as possible to the worksite or homesite of the parent who has primary responsibility for the child's upbringing. Only in that way can the parent be brought into full cooperation in a program of nurturance and education aimed at the child's long-term ability to cope with life in our highly industrialized, highly technological and increasingly internationalized economy and society.

Four years of college, in our middle- and upper-middle-income suburbs, is now regarded as virtually par for the course. It seems like such an obvious goal because every reputable study ever done on the subject has confirmed the fact that an undergraduate education is now the minimal qualification for a good job.

The fact that such an education is currently assured only for the top ten percent of ghetto youth, who are avidly wooed by the wealthiest colleges and universities in the United States, indicates how truly disordered our nation's priorities are. Those whose talents have already blossomed are provided with golden opportunities. Those most in need of education, training, guidance and support--as well as their families--are by and large left to their own devices. If they do find their way into a community college, technical college or other training program, they actually receive lower levels of financial and moral support than are available to those who need far less support because they come from more supportive backgrounds or have already found supportive sponsors.

This situation too must be completely reversed. Our public and private universities and colleges must be brought into a nationwide program--highly integrated and highly comprehensive--aimed at seeing to it that those most in need of help receive the largest amounts of help, at the same time that help is denied to no one in need.

I do not wish to be seen as underestimating the obstacles that must be overcome if such a program is to succeed. For a decade now, starting in the presidency of Jimmy Carter and continuing through the presidency of Ronald Reagan, the rhetoric known as Social Darwinism has been fashionable in the United States. What that rhetoric boils down to is the notion that we live in a sink-or-swim world, and that each and every citizen needs and deserves a bare minimum of help from the governments--federal, state and municipal--that his or her taxes help to support.

That outlook is patently untrue. It will be regarded by historians of the future, whether they are American or European or Asian, as an untruth that was also a danger for the United States considerably more threatening than any offered by the Soviet Union or the People's Republic of China.

Congressman Scheuer, members of the Subcommittee, my years as a university president have taught me not to risk large statements when smaller ones will do. But smaller ones will not do when we are confronting two major and interrelated causes: the cause of our own economic future--the economic future of all of those living in the United States of America--and the cause known as Simple Justice. What we have done up to the present time in order to create a workforce as motivated, skilled and dedicated as those we confront in Japan, West Germany and other industrialized nations has obviously not been adequate and can even be called tragically inadequate.

What this subcommittee is seeking to establish is a turnaround in what now looks like our national destiny: a destiny of decline. As a deeply concerned educator, whose concern has grown in a positive ratio with his experience, I urge you to persevere in your efforts. I urge all Americans concerned about their national future and the future of their children and grandchildren to also give you their willing and enthusiastic support. I will do all I can to rouse support on your behalf among my colleagues in the world of higher education and my friends and acquaintances in other fields.

Thank you for the work you are doing, and thank you again for this opportunity to testify before you.

Representative **Scheuer**. We're going to have a general question on loans for the whole panel as soon as Mr. Silber has finished, but one question about the loans is, they're complicated as hell. This whole incredible variety of aid programs——

Mr. **Trachtenberg**. Absolutely.

Representative **Scheuer** [continuing]. Loans, grants, Pell, this, that and the other thing. You have to have counselors to try to interpret to parents and kids where they can fit in, and what kind of a combination of all these things they can put together.

And then there's a vast bureaucracy of people who are handling all these things. And then you have the question of what kind of a signal we are sending out to these kids; loans are not a very significant part of their culture, yet they are required to take out tens of thousands of dollars' worth of loans over a 4-year college career. How do they react? How do their parents react? These are low-income people who don't have very much financial sophistication. What's the signal we are sending them?

We had testimony in these first 9 days of hearings from Signithia Fordham, a black sociologist, who is an assistant professor at the University of the District of Columbia. She said that a large part of the problem with the black kids is that we send them all kinds of signals that the school system wasn't really designed to include them; it was designed to exclude them. And they get the feeling this is a honky system, this is whitey's system. It isn't their system, and the way they can stick their finger in honky's eye is to fail. And it's sort of a cult at many of the black high schools in the District of Columbia that failing is chic. And when a kid is doing very well academically, he's subject to a lot of peer group pressure; that he's copping out.

So these kids who are doing well academically are under great pressure from the point of view of their own psyche, their own credibility with their peers to excel, let's say, in athletics, and they spend more time and energy in athletics than they really would like to, but they want to prove that they're regular guys and regular gals.

So there seems to be a philosophical good to be achieved, if we can so simplify the system or jigger the system or massage the system, so that it sends out the signal to these low-income kids and their parents—"Hey, this is for you. We really think you can succeed. You can assume that you're going to go to a postsecondary education experience, so long as you do well at school, you're going to make it to college. We know you are, and we're setting up the system so that you will."

Now this is the way the system is for middle-class kids. There's a barely rebuttable presumption among middle-class families that kids are going to go to college. Your kids are college bound from day one, the day they're born. Now if there's some kind of special problem, we make an exception once in a while—Bob Atwell mentioned that only 90 percent of the kids from middle-class families who are doing well in high school go to college, so there's a little bit of erosion. But there's a barely rebuttable presumption that this group in our society is to go to college—and most of them do. And the expectation is a self-fulfilling prophecy.

Mr. **Trachtenberg**. Sure.

Representative SCHEUER. When you tell a kid you're going to be a college kid—just behave yourself, do well, keep your nose clean—you're going to go to college. That in itself, according to people that have testified, produces the will, the desire, the behavior patterns whereby the kid's going to make it and actually go to college, if the financial barrier isn't there.

So one advantage of doing away with this swamp of different programs that the kids have to figure out is that we are saying the education system is for you and you are going to go through college.

Mr. TRACHTENBERG. Yes, I don't have any problem with that, and I think you're absolutely right that the bureaucracy of higher education loan programs is really quite intriguing and probably could do with some consolidation, although I would point out that an awful lot of that is the result of accountability standards and controls that have been put into place by State and Federal Governments to keep track of what happens to the money that you provide higher education. And most of these were not invented by the colleges and universities themselves.

Representative SCHEUER. Why don't they spend as much time and effort keeping track of the money and the results from elementary and secondary education programs? If you ever took a look at the New York City school system, K through 12, from the point of view of financial accountability, from the point of view of receiving a learning result for every dollar spent, from the point of view of society's receiving a payoff for what we spend in our elementary and secondary school systems, why every person working at 110 Livingston Street would be indicted and convicted and sent to jail for life, unless you wanted to apply capital punishment, and I would be against that. [Laughter.]

You can't imagine a more unproductive, less cost-beneficial system than our education system in New York. It absolutely is devoid of accountability, in terms of an education result to be achieved from a dollar spent. But as you say, we're very persnickety about what happens to these diddlely little loans and grants at the postsecondary level. I mean, it's a mind-boggling inconsistency; is it not?

Mr. TRACHTENBERG. Yes.

Representative SCHEUER. We don't begin to look at the cost effectiveness of our elementary and secondary education expenditures. Professor Dertouzos talks about having a test, perhaps a 6th grade test, or a 12th grade test, as just a beginning way of applying the slightest little bit of accountability. Why that would cause a revolution out there with the prospect of the Federal Government requiring the States and the cities to implement even that faint beginning step in accountability.

I mean, isn't that one of the problems in our society that we have to lick?

Mr. TRACHTENBERG. Again, I think we need partners in these enterprises, and one of the ways that I've been raising money, I must tell you, for George Washington University and before that, the University of Hartford, was to go to the people who employed minority graduates of the university and suggest that perhaps they wouldn't mind funding a scholarship for a minority person who was presently attending the college or the university, so that there would be a second wave and a third wave, and I've been moderately successful in that.

I think bringing corporate America into partnership with our schools and our government in this enterprise has some promise as well, but I think it's important that we not confuse process issues and substantive issues. I think you're right, the way we provide financial aid is complex enough that every parent needs the senior partner of Peat Marwick & Mitchell at his right and somebody from Coopers & Lybrand at his left.

Representative **Scheuer**. Plus a Philadelphia lawyer to advise the Peat Marwick & Mitchell accountant, and that system itself, first of all, is expensive and not very productive. That whole system is a turnoff; it's a self-defeating system to a significant degree. And I'm going to ask the panel, how large is that degree.

Mr. John Silber, president of Boston University since 1970, has striven toward superior performance in the development of his distinguished faculty and the attainment of financial stability. He is a national spokesman for higher education and a writer on many social, political, and cultural issues, and he is a nationally known advocate of rigorous academic standards and of innovative ways to finance higher education.

We are delighted to have you here, Mr. Silber. Please proceed.

STATEMENT OF JOHN SILBER, PRESIDENT, BOSTON UNIVERSITY

Mr. **Silber**. Thank you, Mr. Chairman.

I think that, addressing the specific points that you raised this morning, that while it is very important for us to pursue the achievement of educational opportunity, equality of opportunity, it is very important to understand that that should never be confused with equality of results. We can offer equality of opportunity to various individuals and some will achieve the levels appropriate to higher education and some will not, and all we do when we substitute equality of opportunity for equality of results is to degrade the high school diploma and to change higher education simply into postsecondary education. I think there is no accident that postsecondary education is the term that came into popular use in the United States, because too much of what goes on after high school is not higher than anything, and it would be inappropriate to call it higher education. If we talk about extending the educational opportunity to an additional 2 years or an additional 4 years as an entitlement, there would be no difficulty of doing so in terms of the capacity of colleges and universities to accept those students, because we have excess capacity in our colleges and universities right now. The difficulty is that too many of the students coming to college are not prepared adequately for college work. We see this in the decline of the SAT scores from 1966 to the present time: from 958 points down to 904. And in a city like Boston, if you exclude the exam schools, the average SAT does not break 800.

When we find out that the average student attending an undergraduate school of education has an SAT of 855, we know that there are individuals who are being certified as teachers by a variety of so-called "educational institutions" who are themselves ineducable and who could not contribute to the education of the children to which they will be assigned.

It seems to me that since we have the space in higher education, the entitlement through a tuition like the Tuition Advance Fund is the way to go in order to finance it, and I have submitted that proposal as an appendix to my prepared statement. That Tuition Advance Fund would wipe out all of the systems now used for qualifying in loans, make it an entitlement by which a person could get an advance from the Federal Government, require repayment contingent upon employment, insure it against disability, unemployment, and death, so that the person who receives the benefit would not be required to repay unless he were financially rewarded as a consequence of higher education.

When a person does have an advantage, an economic advantage in the consequence of his education, there is no reason why he shouldn't assume a reasonable share of the cost of education, it seems to me, and there's no reason why he would expect taxpayers who are not getting that education to pay for it if he's not willing to pay it back. Under the Tuition Advance Fund, this would be a repaying program that within 25 years would have paid back all of the money necessarily advanced by the Federal Government and would become a permanent national endowment for the financing of higher education, and I believe that is the most effective way to finance the 4 years of education after high school. The cost of that program, if it replaced the loan programs presently in effect, would be an additional $10 to $12 billion to the Federal budget, and that would be a very small price to pay, indeed. If Carlucci's advice were followed and procurement in the Department of Defense were done every 3 to 5 years instead of annually, he estimates he could save $10 billion a year in the Department of Defense budget without cutting out a single weapon system.

Representative SCHEUER. And Joe Califano, the former Secretary of Health and Human Services, testified before the same subcommittee during a series of hearings on how we rationalize our health system, that we were wasting $125 billion a year on a system that was replete with overlapping duplication, waste, and inefficiency—$125 billion a year.

So there are savings out there in our society that we could achieve, if we were a little bit more iconoclastic and were able to take on some of the entrenched establishments who are wasting the resources of our society when there are needs, education needs that desperately need to be filled.

Mr. SILBER. I think that at the present time with the adulteration of the high school diploma, we should recognize that unless we're interested in credentials for their own sake, we have to make radical reforms, because so far as our economic competitiveness is concerned, our concern should be for competence and not simply for credentials. It doesn't matter what credentials individuals have, if they have the ability.

To address this competency issue, I think the most important priority is to extend the preschool program for 3 years. In the project we're undertaking in Chelsea, MA, our highest priority is given to establishing a program that will be open every working day of the year from 7:30 in the morning to 5:30 in the afternoon, so that every family, whether it's with an unmarried teenage mother or whether it's an immigrant family that doesn't speak English, they will have the opportunity of placing their child in an educative environment for 3 years prior to the first grade, so that every child in Chelsea can come to the first grade no longer needing remedial work, not starting behind but having experienced school as a place of fulfillment, as a place of delight, joy, self-discovery and accomplishment, and in that context, we believe that the dropout rate can be reduced, and we can graduate a significant proportion of persons, depending upon their ability and not depending on the unfortunate nature of their background.

Representative SCHEUER. Just to make it simple, do you support making 2 or 3 years of preschool exposure to a Head Start type of experience an entitlement?

Mr. SILBER. Yes, sir, I do.

Representative SCHEUER. Extending the school system down.

Mr. SILBER. Yes. As a matter of fact——

Representative SCHEUER. Which year? Are you talking about the third year of life of the child?

Mr. SILBER. I'm talking about when the child is 3 years old, he would be eligible for school, as opposed to 6 years of age.

Representative SCHEUER. Right. And you favor making that a universal entitlement in this country?

Mr. SILBER. Yes, I do. And I think it will more than pay off its cost in the benefits that will come to society, in the reduction of welfare, in the reduction of crime, and in the payment of taxes. In the meantime, the cost of this program plus the other things that I was going to talk about if I had time——

Representative SCHEUER. Please go ahead.

Mr. SILBER [continuing]. I estimated to take about $100 billion. And I believe that that could be paid for by a transfer of $20 million in each of the successive 5 years from the budget of HHS without any loss to the effectiveness of the welfare programs in the United States, but if one didn't want to do it that way, which I think would be the best way to do it, one could also do it by a dollar tax on every gallon of gasoline and raise the $100 billion. But what it will mean in terms of our educational system is drastic, because it means that the colleges, the community colleges and 4-year colleges and graduate schools will be addressing children or young adults prepared to do college-level work instead of having to become increasingly remedial, and it will mean, by having the 3 years of preschool education, that our program from the 1st grade through the 12th grade can stop being remedial for 90 percent of the students.

In order to do this, however, we must have national exams. I don't mean the national exams have to be a requirement, but they have to be a condition for eligibility to receive Federal aid, and I don't think that there should be any way to exclude teachers from taking a national examination of competence, whether it be a new test developed or simply requiring teachers in high school to take tests for the freshman level in college, which would be a very inexpensive way to establish this.

We certainly know that a teacher who is not competent in the subject matter could not possibly teach it, although the teacher might be competent in the subject matter and still lack the qualities of the teacher. Nevertheless, one is essential.

And the teachers' unions have to be understood as one of the greatest threats to the education of the children of America that we now face, and we're going to have to ask the unions to face a moment of truth. If they believe that they can impose child neglect or institutionalized child abuse on this nation by their refusal to allow the certification of teachers on the basis of competence in subject matter, then the consequence of this will be either that the Congress has to relieve the local school committee of dominance by those unions or there will be a taxpayers' revolt and a privatization of primary and secondary education, because the public can no longer have confidence in the school under this dominance.

We have seen the unions facing elected school officials in a battle that is not equal at all. The union organizes against those school committees and the school committees give up all insistence on quality in the school system and resign themselves to letting the teachers continue what they're doing without being tested, simply as a condition of being reelected to the school committee. And this problem has to be addressed.

I think that we must also have a test available for all students in order to certify their high school diploma.

Representative SCHEUER. More or less what Mr. Dertouzos said.

Mr. SILBER. Yes. And I would say, of course, you don't impose it on them, but you say, "If you want to be eligible for the tuition advance fund, for example, for Pell grants or for Perkins grants, eligibility to compete for those grants, depends upon your having passed a test that certifies your high school diploma as genuine." And you might only have that test in two areas, in mathematics and in English, or it might also extend to history, but it might not. It doesn't have to cover everything, because one can make an induction. A person who achieves a significant degree of competence in the English language in speaking and writing and hearing and who can do reasonably well on senior high school level mathematics will have demonstrated qualities of mind and competence that will enable them to do college level work. So we don't have to test them on everything.

I believe that if we put those systems into place and open up the teaching profession to persons who have not gone through the schools of education, it will be a great benefit.

When we stop to think that the average school of education requires no more than an 855 on the SAT in order to accept students whom they will then certify as teachers, we recognize that part of our basic problem are the schools of education themselves. And I think that we have to say that there should be a moratorium on certification of teachers in all of the States, have at least a 10-year moratorium in which school committees are free to hire teachers on the basis of their competence and not on the basis of their certification by having graduated from some school of education.

A school of education for a highly intelligent person is a negative intelligence test, and they simply will not endure the abuse of that pabulum for 4 years in order to be certified. But we have these housewives whose children are now going to school, who hold degrees from some of our leading universities, who would love to teach and combine a career in teaching with homemaking, and they are simply cut out because they don't have a teacher's certificate. Or we have engineers in our high-technology industries at 55 years of age, whom. the company would like to retire early and would be willing to work with the Federal Government to accomplish that result, who could then teach the science courses and the physics courses and engineering courses in high schools.

All of these highly talented people are excluded from our schools because of the system of certification.

Representative SCHEUER. And what would you substitute for the system of certification to assure the parents and the community that this housewife, whose kids have grown up, who went to a perfectly good 4-year college, who is now capable of teaching, that she is sufficiently adept in pedagogy to perform the job?

What would you suggest as a substitute for the certification?

Mr. SILBER. I would require a one-semester course in practice teaching, for which they would be compensated as if they were fully employed teachers, plus a single course in pedagogy, and I think that would be more than adequate, plus character references, because I think the character of teachers is exceedingly important. They must be worthy mentors to those young people.

I've been concerned with this problem since 1965, when I submitted testimony before a congressional committee and served on Sargent Shriver's planning committee for Operation Head Start. And in that meeting, Benjamin Bloom of the University of Chicago and I argued for a 15-month Operation Head Start at the beginning. We would have liked to have it a 3-year program right from the start, but we knew that was unrealistic, so we fought for 15 months. Molly Greenburg, who was chairing that program, said, "Well, if a 2-week vacation in Washington is good for a middle-class child, then a 2- or 3-week Head Start program will be wonderful for a child who's born in the ghetto." And Ben Bloom and I tried to explain, unsuccessfully, that the child from the ghetto, for the first 3 weeks, will be a nervous wreck just trying to adjust to the change in circumstances from his normal day-to-day life. The best we could do was to push a program of about 12 weeks of Operation Head Start.

One of the reasons why no one knows how valuable an Operation Head Start could be is because Head Start was never extended long enough or made available to enough people. If it were made universally available to every child from age 3 to 6, and if it were open every single working day of the year—not every school day, but every single working day, then parents could avail themselves of it, and particularly these young teenage parents who are really children who had children. They could go back to school——

Representative SCHEUER. Babies having babies.

Mr. SILBER. Yes. They could then go back to school, become qualified to be educated parents and to be capable of holding their whole job, and it would stop the perpetuation and, indeed, the increase of the underclass.

Mr. Chairman, that finishes my oral presentation.

[The prepared statement of Mr. Silber follows:]

PREPARED STATEMENT OF JOHN SILBER

If We Do Nothing: A Thought Experiment

Our educational system suffers from devastating problems. In confronting these problems and searching for solutions, we often begin by trying to put a price tag on the programs and facilities that would be necessary. And each time we do this, we find it difficult, if not impossible, to quantify what would be needed. We are stopped before we start by our inability to accurately predict, in hard numbers, the cost of a solution. We thus begin with confusion, and end in irresolution.

I suggest a different approach. To understand what is not only important but vitally necessary for us to do, we need only imagine the consequences of failing to do it.

Physical Neglect

We can begin by imagining the consequences of physical neglect. Most of the brain cells develop in the first few months and years of life. The consequences of physical neglect begin even before birth. A fetus malnourished in the womb will be born with a less developed brain than a healthy fetus. Privation suffered later in life can usually be overcome, but privation that occurs at the very beginning of life and in the first two years may be beyond redemption. When a carrying mother consumes a diet of junk food, when she smokes, drinks, or uses drugs, the probability rises sharply that her child will come into the world mentally and perhaps physically defective. Nourishment and education work together. Inevitably, malnourished and miseducated children have difficulty becoming responsible adults. The problem will not be solved by looking for a cure. Some remediation is possible for those retarded by malnutrition and miseducation, but for most, a cure is impossible.

If we understand the consequences of this form of physical neglect,, our course is clear. We must prevent this gratuitous retardation, a cruel denial of the equality of opportunity of which our founders spoke. Sound nutrition is educationally essential for carrying mothers and for children from conception to the age of six or eight.

Since remediation is only a limited possibility, the solution to the problem is to be found rather in prevention, and this requires a sustained effort over a long period of time. The public support required for a comprehensive preventive program will not easily be marshaled, for the benefits will not be apparent for a decade or more -- well beyond the temporal horizon of the Congress.

Psychological Neglect

It will not be enough, however, to prevent gratuitous physical retardation. And we may easily understand this by imagining the consequences of psychological neglect.

Early childhood education, properly understood, begins at birth. Our experience with feral children--those rare cases of human infants raised in the wild -- is conclusive on this point: an infant that is not raised by humans over its first five years is human only technically and will never become human in later life. The Wild Boy of Aveyron is a case in point. He is an extreme case, but mutatis mutandis his deprivation is suffered in lesser but still devastating degree by millions of American children.

The physiolgical conditions for eye-hand coordination, aural acuity, and language development, if not excercised in early childhood, will not be available later.

The role of the family in turning the savage infant into a human is crucial. And the American family, with two parents, or with at least one parent or an adult relative at home to ensure the nurture of the child from birth to the first grade, has been sadly reduced, even where it endures as a formal structure.

We mislead ourselves if we believe that the present daycare system is an adequate replacement for the family. Current private daycare institutions rarely provide the basic education and nurture that children require. How could they? Workers in regulated daycare homes earn and average of $4000. In unregulated daycare institutions (which make up about 70% of the total) there is a 42% turnover of staff each year. This underpaid and transient group, however fine and dedicated some of its members, cannot adequately serve the needs of children in their care.

The crucial, delicate, and time-consuming task of raising children cannot be left to chance. It is the greatest responsibility of any society. As it stands, daycare often amounts to child neglect and sometimes to child abuse.

Too many people today are critical of daycare, document and bemoan the decline of the American family, but offer no alternatives. They only deflects our attention from the solution of the problem. To offset the decline of the traditional American family, we must create alternative institutions to provide for the essential nurture of children from birth through at least the elementary grades.

There is nothing new in the idea that a society must care for children when parental care has ceased or is deficient. In times when the family was often disrupted by the premature death of one or both parents, our society provided an alternative in the form of orphanages. If today we want to build a more just nation in which the potential of future generations is developed rather than destroyed, we must provide alternative institutions that can supply at least some of the supports once provided by the family.

What programs, what alternative institutions should we provide? Our children should begin developing skills essential to their further education no later than age three, either in a well-organized and caring home or in a surrogate institution. These basic skills, more fundamental than reading, writing, and arithmetic, are best elicited by caring adults who encourage the development of hand-eye coordination, the development of aural acuity, and the acquisition of language. These once took place normally in a middle-class family without anyone realizing that education was going on. Today it is clear that the many children of all classes, but especially the underclass, are denied these formative experiences. All such children are at risk.

Breaking the Cycle of Poverty and Ending the Underclass: Need for National Educational Daycare

The institution best equipped to provide adequate nurture for children in the absence of families is a national educational daycare system that would care for and educate otherwise neglected children from age three to six on every workday throughout the year. The current Head Start program not only fails to provide this extended care, it also fails to reach its constituency. Only 18% of eligible preschoolers are now enrolled.

No child would be required to attend a properly staffed educational daycare center if parents could and would take care of them. But with these centers in place, children whose parents failed to take care of them would not be neglected. In extreme cases truancy laws would guarantee this provision of care for neglected children. No parent has the right to engage in child-neglect.

Educational daycare should be available to children aged three to twelve on all working days when school is not in session. With such a program established, parents -- including single parents and unwed adolescent parents -- would no longer face the alternative of accepting welfare while trying to nurture their children or seeking gainful employment while neglecting them. Indeed, the eligibility of mothers for welfare payments would be contingent either on their arranging proper care for their children or on their placing their children in these daycare programs while they attended programs preparing them for gainful employment. Families in which both parents are at work during the day could also make use of this program, but tuition would be charged for parents with adequate financial means.

Such a program would benefit not only single parents on welfare or working parents. It would benefit children most of all. This is crucial. If we properly nourish and educate the next generation of children, we can break the cycle of poverty that builds the underclass; we can begin to ensure sound preparation for children from families across the social spectrum. If we cannot help all, it is imperative that we at least help the children. In this way, for the least cost, we can derive the greatest personal and social benefit.

In addition, if there is to be any hope of gradually recovering family structure among the underclass, parents and potential parents must be educated. Most important, perhaps, are unmarried mothers, many of them no more than teenagers, caught in a culture of hopelessness and ignorance. These young women, who have not one but two or three children by the time they are 18 or 19, must be given the opportunity for education.

This requires that someone care for their children while they gain the education that will release them from permanent bondage in welfare. It requires that they know not merely how to avoid pregnancy when they have no means of taking care of their children, but that they put such knowledge into practice. The idea that we can be a free people without being a people capable of self-control and self-discipline is an absurdity.

If we continue the practice of offering a welfare check to any teenager on the occasion of her first pregnancy, we will obviously continue to encourage teenage pregnancy. While we should neglect neither the child nor the mother when such pregnancies occur, financial support should be contingent on the mother's placing her child in a preschool nursery program and enrolling in a school to qualify her for employment. Such a careful and compassionate program of reform, while assuring proper care for the child, would minimize economic incentives for teenage pregnancy and encourage self-control and responsibility in teenagers.

The initial funding of such a program would be expensive. But its cost can best be understood by asking a question: what is the cost of failing at prevention? A citizen slightly retarded by prenatal malnutrition is not likely to become a productive member of society. He will fail in school, and become a prime candidate for a life of crime. He will inevitably inflict costs upon his fellow citizens, whether as an active criminal on the streets or as a ward of the state in a prison. At the very best, he will make no positive economic or social contribution. If such a program transforms him into a tax-paying, productive worker, reductions in welfare and criminal justice costs, along with increased tax revenues, will pay for the program.

Chelsea -- a Case in Point

Perhaps I can best focus on this issue for the Committee by talking about one single town -- the Town of Chelsea, which has most of the social and educational problems found in any inner-city district.

Chelsea is a densely populated city of some 25,000 people, situated in a 2 square mile area north of Boston. Only 44% of all the adults in Chelsea have graduated from high school. 14% of all the infants born in Chelsea have teenage mothers. A 1980 Census found that, among school-age children for whom English was not their native language, fully 23% could not speak English. For adults, the problem was even worse.

Minorities, including Asians, blacks, and Hispanics, are 58% of the school population. The dropout rate is nearly 16% each year. Children enter school at the kindergarten level with less than a 50% chance of graduating from high school.

A middle-class resident of Chelsea, or a resident who manages to attain middle-class status, will probably leave. Those who stay will be those who cannot leave.

Boston University has reached an agreement with the Chelsea School Board, under which the University will join with the citizens of Chelsea in a series of programs which, if successful, could serve as a model for the nation.

Let me focus particularly on the preschool aspects of the plan, and what it will do for Chelsea.

1. Through a family support program, through daycare centers, and through adult learning centers, proper nutrition will be provided for carrying mothers, infants, and preschool children. Health care and training in health and hygiene will also be provided. Thus the first requirement of a sound education -- a healthy child in the classroom -- will be met.

2. Educational daycare programs will be available on every working day, from at least 7:30 a.m. to 5:30 p.m. These programs are properly described as educational, for they will provide the absolutely essential education that once took place in the normal home. Children from two to four years old must be encouraged to develop hand-eye coordination, aural acuity, language skills. They must experience the delight that accompanies learning, new knowledge, discovery, and mastery.

With educational daycare and preschool programs available from ages two to six, and programs available throughout the year for children up to ten years of age, we will be able to assure that each child will be well prepared for first grade, and prepared to advance through all grades thereafter up to grade six. Children will look on teachers as friends and benefactors, and will find joy in attending school. It will be an experience of success building on success, rather than failure enforcing failure.

3. Such programs will solve the largest part of the problem of bilingual education at the most effective age, and in the least expensive way. A child of three from a non-English-speaking home can learn the language within six months to a level competitive with its English-speaking peers. Adult literacy and English-language programs will help strengthen early mastery of English. By the time they enter first grade, Chelsea students will speak English.

4. The program will also make it possible for single-parent families to move off the welfare rolls. With children taken care of during the day, the way is clear for the Federal government to introduce programs for teenage education. Single parents would continue to receive support as long as they attended programs which would train them for gainful employment, or as long as, once trained, they sought employment.

5. The Chelsea plan will introduce mentors: an adult who, without interfering with existing families, will be responsible for each child from the first through the twelfth grade. The mentor program will be particularly important from 6th grade on. During these crucial years, mentors will note deficiencies in educational progress, and see to it that children get help in programs available before or after the regular school day. Mentors will also provide counsel and encouragement, and will be able to watch for signs that the student may be a potential dropout.

Restoring the Dignity of the Teaching Profession

The success of the Chelsea program, and of all similar programs, will depend on our ensuring that there is an adequate corps of teachers. There are a number of concrete steps to be taken to achieve this end.

First we must break the monopoly of schools of education on teacher certification. For a long time certification standards for teachers have been, in many states, almost entirely in terms of education courses -- that is, courses having little to do with education -- and this has given education schools their virtual monopoly on the supply of teachers. In doing so, it has also placed almost insurmountable obstacles in the way of highly intelligent students and highly intelligent adults out of school who will simply not accept the intellectual and spiritual indignity of the typical school of education curriculum. The willingness to endure four years in a typical school of education often constitutes an effective negative intelligence test.

Consider that, nationally, the combined 1988 SAT scores among students intending to study education is 855, a full 49 points below the national mean of 904 for all college bound students. Surely teachers should not normally be selected from those who fall below the national mean. Moreover, the quality of prospective teachers will probably decline even further as schools of education, in a desperate effort to sustain their enrollments, lower their standards still further to encourage more admissions.

Surely some state -- Massachusetts will do -- will have the wisdom and the courage to take the lead in breaking the monopoly of Schools of Education by passing a ten-year moratorium on certification requirements. During the decade of this moratorium, schools would be free to recruit qualified college graduates with majors in academic subjects whether or not they had any education courses. From a vastly increased pool of talent, made up of persons attracted by the ideals of the teaching profession, by its calendar, by the quality of life of teachers, and by intellectual and moral challenge, schools would be able to develop a teacher corps of significantly increased quality.

Such a reform would immediately open careers in teaching to outstanding women college graduates who, as homemakers, would welcome the opportunity of combining homemaking and their duties as mothers with a professional career. Indeed, there is no career so well-designed by the calendar to accommodate this objective as teaching. The teacher-mother will find herself at work when her children are at school, and will, for the most part, find herself free to be with her children when they are on vacation from school. (Needless to say, the sex-roles could be reversed, and the teacher-father might combine the role of homemaker and father with that of teacher.)

Special programs should encourage entrance into the teaching profession by scientists, technicians, and engineers who may no longer be as creative and productive in their positions in business and industry. With perhaps one or two refresher courses, they would be well qualified to teach mathematics, science, and engineering at the high school level. These men and women could not only pass on their knowledge, but even more important, perhaps, could instill their love of their profession, and awaken the spark of interest, imagination, and aspiration in their students. A thoughtful government concerned to improve the teacher corps might seriously consider providing a tax incentive for businesses whose employees, upon early retirement, devote themselves to teaching in fields in which they have become expert.

We also need national measures of educational achievement and competence that can be used to evaluate teachers no less than students. That is, we need a national Bureau of Educational Standards, whose criteria would be available, but not compulsory, for all to use.

We need the American equivalent of the British Ordinary and Advanced School-Leaving examinations. The Ordinary Level Exams would be required of all students seeking a high school diploma, and the Advanced Level exam would be required of those seeking admission to college. The Advanced Level exams would also provide a very useful test for the minimal certification of the competency of teachers.

Even before such tests are developed on a national scale, local school boards can require that their teachers take the subject-matter tests at the freshman college level. A prospective teacher of mathematics who cannot pass a freshman algebra, geometry, or calculus test with a grade of "A" is certainly not prepared to teach at the high-school level.

Against certifying teachers on the basis of competence, it is frequently argued that no test will demonstrate competence, much less excellence, in teaching. This is true, of course. But this inability to test exhaustively an individual's ability to teach should not obscure the fact that there are many tests on which failure demonstrates the inability to teach. A teacher who cannot handle differential and quadratic equations is certainly not competent to teach mathematics in high school. A person who does not know that England is a democracy despite the fact that it has a monarch is not competent to teach history. While we may not be able to prove competence completely, the sheer absence of knowledge is sufficient to demonstrate incompetence. It is a measure of our decline that such an obvious point has been overlooked: knowledge of the subject is a *sine qua non* of competence.

Accepting standards, and demonstrating competence in meeting those standards is a way for teachers to regain intellectual respect, and public support for taxes to finance salary increases. Teachers and teachers' unions must know that it is in the interest of the profession and the union to insist on the intellectual competence of teachers. They must further realize that the rights of teachers can never extend to disadvantaging the students put in their charge.

Higher Education: The Tuition Advance Fund

I have included as an appendix to this testimony an article on the Tuition Advance Fund, a proposal similar to the GI Bill, designed to ensure equality of opportunity and equality of choice for all students qualified to do college work. As the article demonstrates, the Tuition Advance Fund would eventually not only pay for itself, but constitute a vast national endowment ensuring the future of higher education.

Basic Research and Technological Transfer: Conditions of Economic Competitiveness

Our long-rang competitiveness depends on our leadership in basic research and technological transfer, both of which as I argue in the appendeices are dependent on funding the Super-Conducting Super-Collider.

How Do We Pay For It?

Education, properly understood, is investment rather than expenditure. It is investment in our nation's intellectual capital, and the rewards are not only the survival of our society, a decrease in crime, in juvenile delinquency, in drugs, in the tragic perpetuation of an American underclass; the rewards will also include the development of a sophisticated, well-trained and well-motivated work force that can restore our competitive edge, and our ability to compete effectively in international markets.

This is an investment we should make -- and, as I indicated earlier, one we must make. Where can the funding for this investment be found?

A tax of $1 on each gallon of gasoline sold -- with a rebate for Americans earning $20,000 or less per annum -- would raise $100 billion a year. Such a tax would bring the price of gasoline at the pump only to half the typical price in Western Europe. Those who find this a steep increase should consider the still steeper cost of physical and psychological neglect of our children.

As Secretary Carlucci has suggested, improving the procurement system in the Department of Defense by operating on a 3 - 5 year cycle would save $10 billion a year.

These measures would provide funding for the programs I have outlined. With such programs, we could break the cycle of poverty that afflicts increasingly large numbers of Americans, and that threatens to make us a nation divided against itself. We can preserve our national language. We can, over time, restore the economic and social health of our nation.

Representative SCHEUER. Well, you've given us a lot to chew on, Mr. Silber, and I very much appreciate your testimony. It was very much to the point, and you said a lot of things that most people don't have the guts to come and say before a congressional hearing, and I commend you for that.

Mr. SILBER. You do, Mr. Chairman, if I may say so. Some of the things you said about CCNY I have said and many other people have said, but I think it is quite courageous of you to say that.

Representative SCHEUER. Well, it's a tragedy in our city that I've seen happening. It's broken my heart. I didn't go to CCNY; I went to so-called "fancier schools" than CCNY, but I never doubted for a minute that in terms of the intellectual experience and the intellectual product, CCNY could hold its head high and consider itself equal to any university in this country. It was a wonderful thing to have that quality of public education available in New York City, and it made a reality of the phenomenon "pushcart to my son the doctor" or "my son the professor," or "my son the lawyer" in not even three generations. It was the glory of New York, and we degraded it, and we demeaned it, we abused it, and we're just commencing the long, hard pull back. And I think we're going to make it, but we were in the middle of a terrible, terrible experience.

I'll tell you what happened. Shortly after open enrollment in New York was begun, the 4-year colleges became substantially white and the 2-year colleges became substantially black and Hispanic. Instead of looking at the 2-year college system as an appropriate remedial institution, there was a large outcry from the civil rights groups in New York that this whole system was bigoted and prejudiced and that society was sending all the black and Hispanic kids to the 2-year school and all the nice middle-class white kids to the 4-year school.

The result, of course, was that in CCNY and all the other public colleges in New York there were kids who weren't literate—who didn't know how to read, write, count, or process information. And then, as a reaction to this, the New York City Board of Education proposed that as a prerequisite for being admitted to the 4-year colleges—now, that's grade 13 to 16, a student would have to pass a test to prove that he could read at the 8th grade level—the 8th grade level.

There was an uproar. There was a firestorm of reaction to that as proof of what a bigoted, prejudiced society we really were, that we were screening out these kids from a 4-year experience by demanding such an unreasonable, intolerable record of academic achievement that a kid prove that he or she could read at an 8th grade level, in order to start grade 13.

It took us a long, long time before we recovered from that. Thankfully, we have recovered. We are beginning to apply some standards of minimum ability, and we're on that hard road back, but we went through a dark, dark period.

And you have been one of the voices that have helped pull us back, Mr. Silber, and I congratulate you for that.

Mr. SILBER. Will you excuse me, Mr. Chairman? I have a plane that I have to catch.

Representative SCHEUER. Yes, indeed. Thank you very much for coming.

It has been a lot of fun asking questions as we went along; and I hope that none of you have objected to the informality of the hearing, since we didn't have other members present.

I do want to ask this overarching question. There seems to be a consensus that we need to improve K through 12 education. Of course, we do, so the kids are ready for a postsecondary education. But having said that, there seems to be a degree of consensus here that there ought to be equal access after grade 12 to meet the needs of a productive economy by producing a trained work force.

Is that a reasonable statement of an emerging consensus here? [All witnesses nodded affirmatively.]

OK. Now the question comes: How? The present system is this very complicated variety of loans and grants; a wide variety of programs that somehow or other kids and their parents have to sort out. And we're saying to the kids, OK, you have your 12 years. From here on in, you're going to have to figure out where you fit in. We're going to give you some help, but it isn't easy, and it's very complicated, and so on and so forth.

At the other end of the spectrum is a very simple suggestion that we treat grades 13 to 16 the way we treat grades 1 to 12. Now you can't get through grades 10 or 11 or 12, unless you're doing reasonably good academic work. And presumably, grades 13 to 16 would be the same way. If you're not meeting minimum standards of achievement, it wouldn't be for you and the school system would tell you that. But the assumption is that you would be meeting it, and the assumption is, if you're meeting it, then we're going to treat grades 13 to 16 the way we treat grades 8 to 12. It's a simple extension of the high school system along the lines that the Truman report recommended.

Now that may be too big a gulp for us to absorb. I could finance it by rationalizing a health service system along the lines that Joe Califano and a number of other witnesses recommended. There's $100 billion to be saved in our health services system. That in itself would pay the total bill for Head Start.

How do we perceive the current system of loans and grants as it is seen by the low-income minority kid and his parents, and what do we do in terms of massaging the present system? Perhaps not going immediately to what I'm advocating, perhaps that should be a long-term goal, and maybe this is a two- or a three- or a four-stage rocket.

How do we reach the ultimate in ways that might be digestible and that might be acceptable?

Yesterday we had testimony from Governor McKernan of Maine, who's done an excellent job, and he's about to create a financing system, where any kid who can't make it to college because of financial need will be enabled to borrow money to see him through. But he himself said that middle-class parents and blue-collar parents wouldn't take very well to financing the education expense of middle or upper income kids. Well, they do it now in grades K through 12. Is it such a wrenching difference to go from grade 12 to grade 13 to grade 16? Or do we think about means testing? In other words, we'll have automatic education, but for incomes of $40,000 or $50,000 or $60,000, we'll mean test it.

Let's have a little skull session on how we reach the goal and how we can work from where we are now over a period of perhaps a decade to where we want to come out.

Yes, Steve.

Mr. **Trachtenberg**. We're wandering on to very thin ice. You understand that one of the reasons we have this complicated system is that it grew over a period of years through a variety of compromises and arrangements that have been made between the public system of higher education and the private system of higher education, between States and the Federal Government. And so what we have here is a process that developed over, Bob, what, 30 years, or more and which we tamper with a certain amount of peril. I often think of the loan programs and higher education funding programs as sort of a tightrope walker with a long pole, and if you tip it in either direction, off the tightrope walker goes, crashing to the ground.

But I think—you know, once you start talking about means testing, for example, you really are violating an awful lot of the very dearly held precepts of educators, and Lord knows, I myself have been an advocate of that perspective from the vantage point of being president of a private university and have been taken in the corner and thumped on by persons of contrary mind, who would argue that the access to higher education in this country is provided by having low or no tuitions at all in institutions of higher education. You yourself cite the virtues of the City College of New York during a period when there was no tuition, no tuition at all.

And at a luncheon I was at the other day in New York, Mario Cuomo said, left to its own devices with unlimited funding, that would be his dream, that young people in this country could attend colleges and universities without having to pay any tuition at all. He then went on to say, but not in my administration, because it's not going to happen, given the kinds of problems I'm wrestling with here in New York right now, and indeed, today's New York Times has an article about some sector of the State University of New York that's thinking about cutting back or closing down. I just glanced at that coming over in the taxi this morning.

The fact of the matter is that if we're prepared to think in a dramatic and radical way, you're quite right, we could unpack the entire system and come in with alternative schemes, but the vested interests that one imposes upon are really quite extraordinary.

Representative **Scheuer**. Quite vested.

Mr. **Trachtenberg**. Quite vested and very strong and have, I might say, a certain amount of merit. I mean, it's not as if—what you have is a conflict of goods. It's not a question of good versus evil. It really is the kind of issue that you, as a Congressman, wrestle with all the time: given two wonderful opportunities and only $1 to invest, where do you put your dollar? And higher education has been in that circumstance, certainly all the years I've been involved with it, that I never get to make a choice between good and evil. By the time issues get to may desk, as the president of a university, the worst choices have been sorted out by professors and department chairmen and deans and vice presidents, and now they come to me, and they say, "We need $100,000 for the scholarship pool; we need $100,000 for the library. Pick."

And that's essentially the kind of question that sits on the table today.

Representative SCHEUER. Yes. Ms. Eaton.

Ms. EATON. Thank you, Congressman. I think this is an interesting circumstance, because I think you have a number of educators before you who are not automatically and quickly supporting the notion of expansion of the education system, and I think we're doing that because we have some concerns about continuation of the same system. If we're going to talk about expansion, then we need to be able to adequately identify the academically capable, we need to assist those who are not capable, and we need a defensible approach to identifying skills and limitations.

In my view, access in and of itself is not automatically good. There is successful access, and there's unsuccessful access. In addition to the important point that Mr. Trachtenberg made about the complicated nature of our higher education system and the financing of it, I think we might need to consider ways in which we provide yet additional structures or educational experiences somewhere between the current structures K through 12 and higher education that would have the negative impact of making that even more difficult and complex, but I would urge that we not move to a position of indiscriminate support of expansion of the present system without academic reform.

Mr. DERTOUZOS. I want to say something, Mr. Chairman.

Representative SCHEUER. Excuse me. Yes. Hold on just one second.

Mr. DERTOUZOS. Yes.

Representative SCHEUER. Without academic reform.

Ms. EATON. That's right.

Representative SCHEUER. And you're talking about improving the K through 12 system.

Ms. EATON. I'm talking about improving what we do in higher education as well.

Representative SCHEUER. There seems to be a consensus here that the K through 12 system is flawed in some very serious ways.

Ms. EATON. Oh, yes.

Representative SCHEUER. But that higher education is pretty good. Our K through 12 system is the scorn of most of the Western democracies, but our higher education system is the envy of them.

Ms. EATON. We have a fine system; it can be even stronger, especially for those people about whom you are so concerned.

Representative SCHEUER. Yes.

Ms. EATON. Low-income and minority people. We have a situation in which, for a variety of reasons that I probably could argue are defensible, we have a situation in which we have people who are simply not academically prepared in our institutions. We need to either ensure that they become prepared or talk to them about an alternative experience, but we have differentially successful education in this country, even in higher education, and I don't think we can afford to ignore that.

Representative SCHEUER. Differentially successful education, higher education, because the kids come to the 13th grade differentially educated?

Ms. EATON. In part, yes.

Representative **Scheuer**. And that means that the K through 12 system isn't functioning up to par, and that it needs a lot of massaging and remediating.

Ms. **Eaton**. Yes.

Representative **Scheuer**. I totally agree. Yes, Mr. Dertouzos.

Mr. **Dertouzos**. I will be very brief. Mr. Chairman, I would like to be excused after this, unfortunately, because I have to run.

I would like to echo somewhat what Ms. Eaton said from a slightly different perspective. Our entire work on the MIT commission came up with this conclusion of a cry for greater quality, and this creates a block——

Representative **Scheuer**. Greater equality or greater quality?

Mr. **Dertouzos**. Quality.

Representative **Scheuer**. Quality.

Mr. **Dertouzos**. Quality of education.

Representative **Scheuer**. Right.

Mr. **Dertouzos**. The ability to read, to understand, to know math, to be able to handle the equipment, et cetera.

Representative **Scheuer**. This is K through 12, you're talking about.

Mr. **Dertouzos**. I'm coming to that. We addressed K through 12 as the first ill, and after that, what I refer to as the "forgotten half," the people who are between high school and work, and they don't have anywhere to go.

We are so preoccupied with that, and I'm so preoccupied with that, that it creates a block in my own mind, and when we talk here about expanding a system that is not working, the trouble that I have is, do we want more bad education? Certainly not. And you say, of course, we do have to improve the K through 12; however, that is so overpowering in consideration, I want to really make that point, that it creates a mental block, at least to me, and I don't see how we're going to do that. I'm all for expansion, and I think addressing the forgotten half on the upper end and providing at the lower end, preschool possibilities is an excellent idea. But in terms of priorities and in terms of the devastated state of the quality of education in between that sandwich, it's such a big difference, that I cannot begin to think about it with my own prejudices and constraints until I can see how we're going to solve that middle problem.

I just wanted to say that.

Mr. **Atwell**. Yes, that's about what I wanted to build on as well, that if you think of our hesitancy here, I think it has a great deal to do—hesitancy in embracing your idea—with our asking ourselves, if we really wanted to increase the already very high participation rates in education, and that is really what you're suggesting, participation rates in postsecondary education in this country are about 50 percent. That's the highest in the world. That's higher than Japan.

If we were to redefine the system to create even more participation, and if the Federal Government were to proclaim it, it would be a bit hollow, unless something is done in the system below, which is 15,000 local school districts in 50 States. The Federal Government's role in the K through 12 world is so small compared to its role in the postsecondary world, perhaps we have such a wonderful system of postsecondary education because there's a greater Federal role and such an unhappy result in the K through 12 world because there's such a minimal role, but I think you can't really ignore the fact that our hesitancy is rooted in a lot of concerns about what's happening in that world.

I also wanted to comment on the tuition advance fund idea and the whole concept of loans. I worry very much that we are, and I should have said this in our earlier dialog between us, Mr. Chairman. I really worry very much about what I see to be a growing notion that education, particularly higher education, benefits the so-called "consumer." And that's just a myopic view of what really the benefits of society achieves, the economy achieves, as a result of an investment in higher education, and therefore, it seems to me——

Representative **Scheuer**. Bob, you have to be very careful what you're saying, because if you keep hewing to that line of argument, you're going to end up right where I am [laughter]—then you're in deep sushi.

If we're looking at the benefit to society of having an educated, skilled, productive, competitive work force and citizenry, then we have to say, well, why isn't it for everybody? What are we waiting for? Why don't we bite the bullet?

Mr. **Atwell**. I'm happy to do that, Mr. Chairman. I was only at that point commenting on the question of financing all of this through loans to the consumers, and I think loans have a place. I'm not opposed to all forms of loans. I just think that there's some limit to the extent to which this generation of students ought to pay for its own education, and I think we've gone well beyond that in the past 8 years.

Representative **Scheuer**. I mean, if you accept that students should pay for their own education, why aren't they paying for their high school education?

Mr. **Atwell**. I'm not accepting that, is what I'm saying.

Representative **Scheuer**. I know you're not accepting that, but I mean, as a logical matter, we're looking at this as an intellectual theorem. If students should pay for their own education, why this arbitrary cutoff between grade 12 and grade 13? If it has no logical validity, then let all kids pay for their education. If they can't get educated, then they don't learn how to read, write, and count.

Now the absurdity of that statement is self-evident. It's self-evident because society needs an educated citizenry, and if it does need an educated citizenry, why this dividing line? The consumer pays for it after grade 12, but society pays for it before grade 12? I mean, it's not written in the stars; it's not in the Sermon on the Mount or the Ten Commandments. Where does this bifurcation come from at grade 12?

Mr. **Atwell**. I think this hearing ought, by the same token, to be held with representatives of States and local school boards, State agencies and local boards as well as at the Federal level. We ought to really sort out who's responsible for what parts of this system, and that includes the Feds, the States, the local school districts, the property tax, the income tax, and how much parents and how much students should have to pay. None of that has ever really been systematically worked out. Each party has bitten off a particular piece of it and there's really no rationale that's ever been developed for the respective responsibilities of the various parties.

Representative SCHEUER. Well, this has been a marvelous panel, and I can't thank you enough. You've been very, very stimulating.

Thank you all very much.

We will now go to the last panel with apologies.

Audrey Cohen, Frank Newman, Donna Shalala, and Hoke Smith.

I apologize for the delay and thank you for your patience and forbearance. You've been long suffering, and I'm very grateful that you all hung in here until quarter to 12.

I have plenty of time, and I hope that you do, so that we won't feel pressed.

Are any of you under any time pressure and therefore would like to testify first and answer a few questions?

Are you, Mr. Blair.

Mr. BLAIR. Yes, sir.

Mr. NEWMAN. I have a 12:30 deadline.

Representative SCHEUER. The two of you have to leave at 12:30. Well, why don't I hear from the two of you first and that'll leave us a little bit more relaxed with Audrey Cohen and Donna Shalala and Mr. Smith.

Stephen Blair is president of the National Association of Trade and Technical Schools. He represents over 900 accredited trade and technical schools and 250,000 students nationwide.

You've heard about the "forgotten half"?

Mr. BLAIR. Yes, I have.

Representative SCHEUER. I suppose that that's your group?

We're delighted to have you here. I appreciate your patience. Please talk to us for 5 or 6 minutes, and then we'll have a few questions for you before you have to leave.

STATEMENT OF STEPHEN J. BLAIR, PRESIDENT, NATIONAL ASSOCIATION OF TRADE AND TECHNICAL SCHOOLS

Mr. BLAIR. Thank you very much, sir.

I really look forward to this opportunity, because the area that you're discussing is very important to the whole area of postsecondary education. The first panel very much focused on the issue of higher education, and I prefer to call it postsecondary education.

Representative SCHEUER. That's how we have been referring to it.

Let me ask all of you, in addition to talking to us about some of your personal or pet projects to address the question of access. This is really what these 2 days of hearings are all about. Improved access to Head Start by the four-fifths of the young people who come from disadvantaged homes in our country who urgently need it and aren't getting it and improved access, as you say to postsecondary education.

Mr. BLAIR. Yes, sir. Be pleased to; however, I'd like to put a caveat at the very beginning. I don't believe that access is the single issue, and that was brought up at the beginning of the last panel. If you're committed to something that has little or no value or your time spent there does not make a difference, the access, I believe, sets up false hopes. So you need to know with confidence that what you're getting is a quality product and that product achieves the goals and the purposes the potential student sets for himself or herself.

If you'll indulge me for just a couple of moments, sir, because I do represent a segment of the population that is seldom understood or little is known about but yet has, I believe, a substantial number of answers to the very problems that you're dealing with. Proportionally, we serve more low-income, more disadvantaged students than any other sector. Where that chart disappears for Hispanics and blacks, those people appear in our schools, and I think we have a lot to share with you as to some of the remedies.

As a small correction, the National Association of Trade and Technical Schools represents over 1,300 accredited schools representing some 700,000 individuals, a slight difference there, sir, yes.

Representative SCHEUER. I apologize for the error. I don't know how it crept in.

Mr. BLAIR. That's all right. And that happened in the last 3 weeks, so it's a tremendous growth.

We represent and train in over 120 different careers, and those range in careers from actor to x-ray technician, including very high tech as well as old-world skills.

We are recognized by the Department of Education as providing the hallmark of accreditation to qualified trade and technical schools. So all the trade and technical schools that are approved for participation in the Federal programs come through us.

Our programs in length run from 3 months to 3 years. Some also offer bachelor degree programs. We are not, as generally perceived and represented by 20-20 or former Secretary Bennett's rhetoric on defaults. I assert that we are the least known sector of postsecondary education but perhaps a model for answers for many of the questions that we are agonizing over in cost effectiveness, in questions of cost containment, in the areas of effectiveness and achievement of goals and purposes.

I assert that we are the most effective sector of postsecondary education in achieving its goal, for we say that goal is technical education and the placement of entry-level employable personalities. Based upon "High School and Beyond," the federally funded longitudinal data, the completion rate for community college vocational students is 45 percent. For private career schools, it is 65 percent. The average completion for a 4-year liberal arts degree is 65 percent and the 4-year completion in liberal arts for minorities and high risk is 29 percent.

We measure ourselves on outputs not process. We judge ourselves by completion rates and placement rates, not on the facilities.

Representative SCHEUER. Can I ask you a question?

Mr. BLAIR. Sure.

Representative SCHEUER. I apologize for interrupting. Is that lower minority completion rate for the 4-year course a result of financial inability to pay fees, or is it the result of inability to do the work satisfactorily?

Mr. BLAIR. I suggest, sir, that the financial aid has an element in it. I was with the U.S. Department of Education for 13 years administering the Federal student aid programs. Student aid has an element to it, but what happens is that when a student coming from a disadvantaged background enters a postsecondary institution, he is in need of major support systems. The whole title III program is developed and designed to create that support. But if in a traditional arena you provide a passive educational experience, in other words, it is put before the student to indulge in, play with, experience, without support, then that person will fail. And I believe that to have postsecondary traditional liberal arts succeed, they have to take not only the commitment to admit, but also the commitment to see that student complete the education which requires a level of outstanding support. In my opinion, these schools are not providing the necessary support. Our schools have a different philosophy and way of dealing with people that I'll point out a little bit later and you'll see why the retention rates are as high as they are.

The population that we serve, proportionally, are more low income, high risk and women than any other sector of postsecondary education. We serve two times as many blacks and Hispanic students as public 2-year institutions; 25 percent of our students have a prior postsecondary educational experience. One-fourth of our students have been someplace else before they come to us.

Representative SCHEUER. Excuse me. Elaborate on that. What does that mean?

Mr. BLAIR. That basically means they have gone to a university or a community college first, and then they have come to us.

Representative SCHEUER. Because they found the college or university ill suited to their needs or irrelevant to their needs?

Mr. BLAIR. In some cases they also have a bachelor's degree, and in a recent culinary institute that I visited, one-fourth of the people had a B.A. degree or higher. They wanted to be chefs. Of course, the old standby one liner is that you send your daughter to Bryn Mawr for her degree and Katie Gibbs for a job. Katie Gibbs is a secretarial school.

Representative SCHEUER. Yes.

Mr. BLAIR. Thank you. Sixty percent of our people receive Pell grants and 70 percent receive Stafford loans. Since both of those are need based, we have, therefore, a high level of need on the part of the population we serve; however, we also serve middle and upper income students, who choose to receive a technical education rather than a liberal arts education.

Out of the report of "High School and Beyond," students attending private career schools are similar to those students who do not attend or participate in any education after high school. Economically, that is what they look like. However, 5 years after leaving high school, the private career school students report working full time and have an income more or less matched to those who have attended college. Therefore, our completion rate becomes even more significant in the context of the population that we serve.

In the testimony that we've submitted, we speak of the concerns about the Federal Student Aid programs and the possible remedies to ensure access of the high-risk students to postsecondary education. Some of the ideas being considered right now will, in fact, put a high-risk population very definitely in jeopardy and private career school students will be excluded from participating in several of the very critical programs that specifically were designed to benefit the low-income and disadvantaged students.

Representative SCHEUER. And which would those be?

Mr. BLAIR. Most particularly, the Carl Perkins Act, sir, JTPA, and in particular also the new College Savings Bond Program.

All of that is in the prepared statement, sir.

The topic of the hearing, the cost benefits of assuring up to 4 years of postsecondary education. In "The Forgotten Half: The Non-College Youth in America" reports that by 1990, only 20 percent of the jobs will require a college education and all the rest will require some level of technical education. Private career schools are providing technical education to half of the full-time students enrolled in vocational-specific programs in the United States. There are 1.4 million students enrolled at 4,000 accredited private career schools. Access up to 4 years is a good idea; however, if it is to carry out the traditional system and simply extend the current process a couple of more years, we do not think that that has great value. However, to provide access for a postsecondary educational experience that is appropriate for the individual, based on his or her choice to pursue a field of study that is appropriate and to their liking, we highly recommend and support.

For some, going on to college is a superb idea; for many, having completed high school and going off to work and realizing that a college education is where they want to go is a terribly appropriate thing. We like the idea of increasing that probability of access, but we also believe that there's a huge number of people whom college is not appropriate because of their own choice, that perhaps trade and technical education is appropriate, could be of benefit, and we would like to ensure that they have the choice to be able to go beyond high school and that kind of program we highly endorse.

Representative SCHEUER. That's exactly what we're talking about. We're talking about giving the student who's finishing high school a complete array of options. I mean, we did that 40 years ago with the GI bill of rights. Why should we do less now? And I would think that the array of options would be a 4-year academic course, a 2-year junior college, a course in industrial arts, a proprietary school. The whole length and breadth of our education experience would be represented and the young person would have that choice.

Mr. BLAIR. We also suggest, sir, that as we look at that, consideration needs to be given to the whole question of the effectiveness of the training.

In a recent workshop put on jointly between ACE and the National Association of Student Financial Aid Administrators on the whole question of awareness, they dealt very extensively with what they called the certainty of opportunity. It is letting a student know, when they're still in high school and preferably in grade school, that they will have that access to postsecondary education. It's knowing that there is financial aid that starts to make the real difference in their ability to complete the education in high school and to know that there are possibilities beyond.

We suggest that kind of intervention is critical to make people realize that there is something beyond high school and there are reasons to stay in high school.

Representative **Scheuer**. I don't know if you were here for the last panel, but we discussed this issue very clearly. It seems to me there's an independent good to be achieved, especially in the low-income minority community, who have a sense out there that this education system really wasn't designed to include them, that in fact it was designed to exclude them. And one way, it seems to me, that you can build a sense of expectation and a sense of confidence in a young black or Hispanic person from a deprived home is to say this system is designed for you, and it should be your expectation that you are going to be in some kind of postsecondary experience and all you have to do is show us that you value it and that it would be of value to you. Just do good work and you can look forward to having the whole option of postsecondary experiences.

So it seems to me that could be a self-fulfilling prophecy. If you send the young child a signal that this is the whole panoply of options, they may well begin to feel that "this is our system. I'm not being screened out. I'm being included. This is for me." Maybe that would give kids a new sense of hope and confidence that they can succeed in this system, that it was meant for them, that there is an expectation that they will succeed and they will benefit by it and they will benefit society from having honed their skills through a postsecondary experience. And it's the perception that it is for them, that society has confidence that they're quite capable of making it. And that could be a self-fulfilling prophecy, and that's a very important point that you just hit on.

Mr. **Blair**. In your just-released report, you suggest that vocational programs should, one, be developed in concert with business and labor communities to ensure that business needs are reflected in the training provided, provide opportunities for on-the-job training so students are exposed to the realities and requirements of the workplace, teach students to be creative, solve problems, work in groups, perform a variety of tasks to adapt to a continually changing job market, teach students about work ethic and employer expectations, behavior, attitude, attendance, test students on proficiency to ensure that the employers are getting qualified people and provide work-study opportunities so a student can earn money and find out how the real world is.

Sir, the private career schools in the United States do that. Their whole system is based upon work experience, hands-on education. Some of our places actually have punch-in time clocks. They are dressed in uniforms. Their purpose is to not only create a skilled individual but also to instruct them on the world of work, because as an employer looks for somebody, skill is about the fourth thing they ask about. Employers are looking for somebody who will show up on time, put in a full day's work, be able to relate with the customers and their fellow employees and be able to do the skilled job.

What we are about is creating an employable personality in the shortest time period. And I assert that the private career schools are cost effective. Recent students show that in the vocational area that a private career school produces a graduate, an employable personality at about half the cost of a public institution. We are market sensitive and responsive, which means that we must, in fact, respond to what the industry needs and to fulfill the demands set by industry for skilled people. If one of our schools does not respond to the market, it goes out of business.

Thus, I assert that we have a model to answer many of the problems that you and your subcommittee have articulated, and not only for vocational education but for all of postsecondary education.

I would be more than pleased to answer any questions.

[The prepared statement of Mr. Blair follows:]

PREPARED STATEMENT OF STEPHEN J. BLAIR

Mr. Chairman and members of the Subcommittee:

I welcome the opportunity to address the Joint Economic Committee on the costs and benefits to the economy and society of assuring postsecondary access for at risk youth. The topic could not be more urgent. Congress and the next Administration must give this a high priority and work together to devise a comprehensive strategy to solve this problem.

The statistics cited in the recently released American Agenda, written by former Presidents Ford and Carter, underscore the urgency and magnitude of the problem.

* One million youth drop out of school each year.

* Dropout rates of many urban schools are 50% or more.

* More than 50% of all Hispanic youth will drop out of school.

* One child in five lives in poverty. Children in poverty are one-third less likely to graduate from high school.

* More than 50% of all teenage mothers end up on welfare.

NATTS, as well as all other private career schools, community colleges and historically black colleges and universities, serve the vast majority of low income, inner city, disadvantaged youth.

WHAT IS NATTS?

The National Association of Trade and Technical Schools is comprised of over 1,300 accredited private career schools that educate over 750,000 students each year in more than 120 different career fields. As recognized by the U.S. Department of Education, NATTS provides the hallmark of accreditation to qualified private trade and technical schools.

The career fields range from actor to x-ray technician. The dominant fields are auto/diesel, electronics, heating and air conditioning, and medical/dental technicians. Skills include high-tech and old world crafts. Programs range from three months to two years in length. Each program is designed to develop competency in the shortest period of time possible. All programs are hands-on technical education and are designed to create skilled entry level personnel.

The national retention rate is 74% with a 73% placement rate. Some schools maintain a 100% completion and 100% placement rate. Enrollments range from five to 2,000 students with the average school being 250 students. Owners include individuals and corporations such as ITT, DeVry and National Education Center.

ECONOMIC BENEFITS OF TECHNICAL EDUCATION

There is little argument with the proposition that general education and training benefit both society and the individual. The second proposition that is supported by everyone who studies the problem is that the economic payoffs for training risky students are higher than the return for the average student.

Over half of the young people in our society do not attend college. There are approximately 20 million young people between the ages of 16 and 24 years of age who are unlikely to attend college. They are deprived of the investment that society makes available to college attendees. This nation spends $124 billion a year on college students. The investment in those who do not want to go to college, but want to train for a good job and a decent future, is negligible.

Congress and the states have not been sufficiently responsive to the need for postsecondary vocational education as an alternative to college. The Forgotten Half: Non-College Youth In America reports that by 1990, only 20% of the jobs will require a college education and all the rest will require some level of technical skill. Private career schools are training at least half the full-time students enrolled in vocationally-specific programs. There are 1.4 million students enrolled in 4,000 accredited private career schools who receive about 2.5 billion dollars, mostly in federal student loans and grants. That compares to 12.4 million college students receiving about $16 billion in loans and grants from all sources. By the most liberal estimate, the W.T. Grant Foundation estimates that $7 billion dollars are spent by federal, state and local government on training opportunities for non-college youth. This is about one-seventh the investment of college youth.

These nonacademic students are having a harder time surviving in the labor market than before. The old opportunities available in manufacturing industry with union-secured wages and security are disappearing. Young, non-college youth are victims of the changing economy. The report, The Forgotten Half (William T. Grand Foundation, November, 1988), has documented the declining economic fortunes of young people. The increasing jobless rate among young people, especially minorities, results in other legal, health, and welfare costs for society.

Non-collegiate youth are a diverse population, but compared to college attendees they are poorer, more likely to be males, have lower academic ability and are more likely to be minorities. Given the diversity of non-collegiate youth, it is important to focus on those with the most problems because they are least well served by most current training and education options.

NATTS estimates from the available research that a high school dropout costs society $26,000 a year in tax supported social services. In addition, dropouts will pay less in taxes over their life time. It is this additional dependence on social services that makes these risky student such a high payoff if they receive education which allows them to enter the labor market. Not only would they pay more taxes, but they would consume fewer services.

A conservative estimate suggests that postsecondary education for high school dropouts would raise individual income by $107,000 over the lifetime of the dropout. If one assumes a marginal tax rate of 15%, the public loss in taxes is $16,125. If those numbers are multiplied by the half-million high school dropouts each year, the individuals lose over $55 billion per year and public taxes are reduced by over $8 billion. Most estimates of lost income and taxes are much higher.

The problem of poorly educated students is great and getting worse because of changes in the economy. Employers are increasingly concerned about the lack of preparation among new workers. There is less demand for untrained workers and the ones that are working are receiving very low wages in service jobs. Education is the answer, but these students do not want to continue traditional general education. That is why they dropped out in the first place.

The characteristics that make students high school dropouts make them poor candidates for further education or employment. They have lower test scores, low self esteem, low motivation, they do not like school, and they often have trouble with authority. The majority of these students do not succeed in college. According to Vincent Tinto, an expert on dropouts, only 20% of these low income, low ability students enrolling in college ever receive any sort of degree or certificate. What this suggests is that the simple comparison of outcomes for graduates with dropouts misses the obvious fact that dropouts have problems other than education that relegates them to lower income jobs and higher unemployment.

In addition to developing job skills, successful technical education must include what economist Garth Magnum of the University of Utah calls job-getting and job-keeping skills expected by employers. Magnum points out that low income students are motivated to enroll in a technical education program that leads to getting a job that pays a good income. This motivation exists because the programs taught at private career schools are short term, hands-on training delivered in short modules that reinforce learning, and are directly related to the job skills necessary for employment. Education and training programs that do not include these factors are not as successful.

FEDERAL AID PROGRAMS AVAILABLE FOR AT RISK YOUTH

The predominant forms of federal assistance our students use are the Pell Grant Program and the Stafford Loan Program, formerly the Guaranteed Student Loan Program. Approximately 60% of NATTS students receive Pell and approximately 70% of our students receive Stafford Loans. Our students also rely to a lesser extent on Perkins Loans, formerly National Direct Student Loans. For the most part, our students have been excluded from campus based aid programs like the Supplemental Educational Opportunity Grant and College Work Study Programs. Although I am pleased to note that as a result of the 1986 Reauthorization Act, College Work Study has been somewhat expanded enabling more of our high risk students to participate in this program.

Access to the Stafford Loan Program for at risk students is in serious jeopardy. As you know, there has been much attention about default rates in the program over the past year. What has been lost in the debate is that the net default rate has remained virtually the same for the last 8 years, at roughly 12%.

What has changed, however, is the explosion of loan volume during the same time period. Before the Reagan Administration came into office, the Pell Grant was the primary means of financial aid for low income students. Since 1980, a gradual shift has occurred from Pell Grants to loans. Today, the Stafford Loan is the primary means of access to a postsecondary education for low income students. Contrary to the Department of Education's assertion, all studies demonstrate that the lower the income of the student population served, the greater propensity to default. As I've stated previously, private career schools, like community colleges and historically black colleges and universities, predominately serve low income students. These types of schools have higher default rates than traditional four year universities.

Although there have been no draconian measures enacted in either legislation or regulation to reduce the default rate, former Secretary of Education William Bennett effectively used his Cabinet position to begin to achieve what he unsuccessfully sought to accomplish through regulation: to restrict access to a postsecondary education for low income students. In addition, recent changes in the 1986 Reauthorization Act and proposed regulations and statements by officials of the Department of Education have made continued lender participation tenuous for high risk students.

We are seeing lenders deny loans to low income students based on the school's default rate. Guarantors will not guarantee loans to low income students for this same reason. A school does not default - students they serve default.

In the absence of Pell Grants, loans are the primary means for low income students to attend a postsecondary institution. We suggest the following changes must be made in the Stafford Loan Program to ensure access for low income students.

- Require that each state guaranty agency shall ensure that there is a lender and guarantor of last resort in its state. In addition, no lender or guarantor of last resort shall deny a loan to any student based solely on the default rate of the institution that the student plans to attend and the default rate of the lenders and guarantors of last resort will be outside reinsurance triggers.

- Provide economic incentives to lenders and guarantors who serve high risk student populations. An economic incentive to a lender could be an increase in the special allowance they receive to service the loans. An economic incentive to guarantors could be an adjustment in the reinsurance rates the federal government pays guarantors to guarantee the loan.

There are other federal programs that private career schools are technically eligible to participate in but for the most part are excluded from participation at the implementation level. These programs are the Job Training Partnership Act and the Carl Perkins Vocational Education Act.

JOB TRAINING PARTNERSHIP ACT

Private Industry Councils (PICS) determine participation. In many areas, PICS exclude our sector from participation. Also, the current practice of awarding training contracts that put an improper emphasis on retention and placement resulting in the funding of the shortest training possible to reduce the total number of dropouts. A "creaming" of the applicants is done to ensure that these people complete the training. These practices do not well save the high risk population.

CARL PERKINS VOCATIONAL EDUCATION ACT

In this program, state agencies determine which schools may participate. Private career schools can only participate if the equipment used in the training cannot be found in public community colleges and universities, or, if the cost of the education is less expensive at a private career school than in a community college or university.

Access should be judged on the school's competency to train and place in the areas needed, not on the absence of equipment in a public school. Determination of the true cost of education should take into account public education's administrative overhead, cost of facilities, the subsidies provided to public education and "lost opportunity" costs to the students in the fixed program lengths found in community colleges.

Obstacles should be removed in the implementation of JTPA and the Carl Perkins Vocational Act which deny equal access of students to private career schools.

The greatest success in federal programs has been found in the programs that enable the individual to exercise personal choice in obtaining the educational experience that is most appropriate for him or her. These successful programs are the GI Bill, Pell Grants, and the Stafford Loan Program. Programs that are less successful are those in which a bureaucracy determined what is "appropriate" education for an individual.

Therefore, consideration should be given to designing retraining programs that give the ability of the individual to choose, through loans, grants, or vouchers, the appropriate training for him or her and not establish bureaucracies that determine for others what education they should obtain.

Finally, there is a new federal program in which private career school students are totally excluded from participation. The program is the recently enacted Education Savings Bond Program that was passed on the last day of the 100th Congress.

The legislation is targeted toward low and middle income families. The savings bonds can be purchased either outright or through weekly payroll deductions. The money can be used at any two or four year university. However, the money cannot be applied to attend a private career school.

By excluding private career schools, Congress has told low and middle income parents that the federal government will help their children attend a postsecondary institution except if their children choose to attend a private career school. As you know, college is not for everyone. Many students choose to attend a private career school. This exclusion implicitly states that it is now federal policy to restrict academic choice for middle and low income families.

Low income students who choose to attend a private career school should have the same opportunities and benefits awarded to them as the federal government provides for students who attend a traditional university. To remedy this, I recommend that the definition of eligible postsecondary institutions in this new program be defined as an institution described in 20 U.S.C., Sections 1088 and 1201 of the Higher Education Act.

COST OF DOING NOTHING

- \$41 billion is spent each year on welfare programs.
- Teenage pregnancies cost the U.S. over \$16 billion each year in welfare costs alone.
- Remediation and lost productivity cost U.S. business \$25 billion per year.
- Each year's dropouts cost this country \$240 billion in lost earnings and foregone taxes over their lifetimes.

Clearly, providing postsecondary access for high risk students pays off. A high school dropout who worked full-time in 1986 made $20,000. His peer with some post high school education made $28,000. Fifteen percent of high school dropouts are unemployed, compared to 5.3% of those with some post high school education.

Private career schools provide technical education for students at a much lower cost to taxpayers than public colleges. The public pays about $2,000 per year to enroll a student in a private career school. The estimate does not include the amount of taxes these institutions pay. In other words, this is a high estimate.

For a student at a traditional college, the combined cost of student aid and the subsidy to the institution is about $4,500 per year. That does not include the cost of dormitories, meals, books, hospitals or other non-educational expenditures. It also does not include the capital costs of buildings or major equipment. In short, it is probably a low estimate.

Private career schools also have a better completion rate than public colleges for high risk students. The completion rate for at risk students at a four year college is 29%. The completion rate for high risk students in the job corp program is 33%; in community colleges, 45%; and at private career schools, 65%. Each of these sectors has different missions, programs and students so a direct comparison is not appropriate. However, the facts do make the case that private career schools do as well for their students as traditional colleges do for theirs.

In summary, it is evident that we as a nation are highly under-invested in non-collegiate youth. The changes in today's market require more specialized education, but not necessarily college. Saving a few million dollars now by reducing school opportunities will cost billions of dollars in the future.

Private career schools do a better job of preparing high risk students for employment through the technical education opportunities and at a lower cost to the taxpayer.

Representative **Scheuer**. Well, we appreciate your testimony very much. There's a feeling out there that a lot of vocational education in this country is training young people to make carriages and buggy whips with skills that are more or less irrelevant to modern society.

Would you say this is the reality, for the most part, in the public vocational schools?

Mr. **Blair**. I'm not sure that it exists that way, sir, because my experience in the public vocational arena is very limited. I can definitely say that the stereotype does not exist in private career schools.

Representative **Scheuer**. Yes.

Mr. **Blair**. Private career schools are entirely focused on filling the needs of business and industry, and a recent study produced by the Opinion Research Corp. demonstrated that aside from on-the-job training, which is about a $90 billion annual industry, the next major supplier of technicians in the United States comes from private career schools.

You can walk into a school of avionics and find the most sophisticated electronic equipment in the industry. They educate people, who then go to work for United and American and others. Many of our people are hired by Xerox and other major electronics people, plus the entire area of support in medical-technical fields, heating and air-conditioning, auto diesel, truck driving, all of those areas where we so desperately need technicians and craftsmen for us to be able to effectively compete in a world marketplace, we must have the technicians, and they do not simply spring from Zeus' head full born. They are created, they are educated, they are brought into being, and there are a lot of people who are totally capable of being in college who choose to work with their hands, and they use a vocational technical program.

So what we're basically suggesting is what we need to do is create an openness for all possibilities for each individual to choose an educational experience that fulfills their need. It goes back to the Gardner quote, "A society that does not pay equal attention to its philosophers and plumbers will soon find that neither its pipes nor its theories hold water." [Laughter.]

So what we're looking for is that equality of balance. As I go to a seminar to engage in some lofty philosophical discussion and my car breaks down, I need a mechanic at that time, not the philosophical discussion, but both have their place. And what we're seeking is the equal quality, because for this society to really work, each individual must feel that they are fulfilled, they have a place and that they are doing something of worth and value, and having that kind of skill, and the kinds of schools that we have support individuals in creating that sense of self-esteem.

They are very supportive. When an individual comes in, attendance is taken two and three times a day. They know where the student is. They know when they're starting to slip behind. Attention is paid to support them, so, in fact, it is a very supportive educational experience, plus, they can see the relevancy. If they come in and need remedial education, they're not given traditional remediation. What they're given is a program of reading, writing, and mathematics that fits into the educational program so that they can see the relevance.

When they go home at night, they can tell their people what they have been learning as a technician, and they can now see the relevancy of having to read, having to understand.

Representative SCHEUER. These are private career schools that you're representing.

Mr. BLAIR. Yes, sir, they are.

Representative SCHEUER. What would you perceive to be the adequacy of access to those schools by young people who finished secondary school and would like to make a career in a trade, as blue collar workers? I take it that that's whom you're appealing to.

Mr. BLAIR. Actually, it's not just blue collar. Some are blue collar, but a lot of them are white collar, and we also have the leather apron group.

The access is so very much dependent upon the availability of student aid, and this is where student aid comes in. The schools are out there, the programs are out there. The community colleges serve the exact same population to a very large degree that we serve.

Representative SCHEUER. Yes.

Mr. BLAIR. They have exactly the same problem, because it's not simply the tuition fees, but it's supporting yourself and your family. It's the day-care system that you need to take care of your child while they're in school and all of that full range of support. That's where the financial aid comes in. Because there's been a choice to not have grant money in a level sufficient to handle those costs, we've had to rely upon loans. The difficulty with the loan program is, as people start to get concerned about the default rate, what they're focusing on is a simple aspect of that program. A default rate is a function of the population served. The lower the income, the higher the default. If you start to exclude people who attend either a community college or a private career school two things happen. You lose the ability to have access to the loan because of the high risk. Banks won't cover them because they'll lose their insurance. Guarantee agencies are concerned, because of their trigger. But more importantly, banks will stop serving them because there's not a profit to be made.

Representative SCHEUER. I understand that.

So we have the problem of access there that is a specific element in this whole problem of access to postsecondary education, and I take it you feel that loans, particularly as they apply to these low-income minority kids are a turnoff and a problem, both to them and for their parents.

Mr. BLAIR. They're willing to assume it, if they know that it leads to employment and the employment will pay it off, and because their programs are short, there is an immediacy to it, so they're willing. So the concern is not that they're not willing to take them, but the concern is to get them.

Representative SCHEUER. To have them available.

Mr. BLAIR. Yes, sir.

Representative SCHEUER. Thank you very, very much, Mr. Blair.

Mr. BLAIR. My pleasure.

Representative SCHEUER. Now let's go to Mr. Newman.

Mr. Frank Newman has been president of the Education Commission of the States since 1985. The Education Commission of the States is a 22-year-old compact of States created to assist State political and education leaders in developing and implementing effective State education policies and programs.

We're delighted to have you here, Mr. Newman, and we give you a gold star for having identified that report as the Truman report of 1947.

Mr. NEWMAN. Actually, I even knew the year. That's amazing.

Representative SCHEUER. You did. [Laughter.]

Mr. NEWMAN. I wish I'd had a chance to get that in. [Laughter.]

STATEMENT OF FRANK NEWMAN, PRESIDENT, EDUCATION COMMISSION OF THE STATES

Mr. NEWMAN. One other thing that may help on the gold star front, you mentioned you're a GI bill alumnus. I've been through the GI bill, but I want to point out, it doesn't always work. You went straight, and I went into education. So you can't count on it as a certainty. [Laughter.]

Mr. Chairman, it is a privilege to be here.

I want to make just one opening comment on the Federal role and then comment on the question of two issues that you posed to us.

On the Federal role, of course, statistically, the bulk of the money and the bulk of the policies come from the States, but it does seem to me that the Federal role is terribly important and that the issue is not solely money. Money, of course, is important, as any educator will tell you.

I think the Federal role has an issue beyond the question of money, in the sense that while money is important, this country is going to spend, this year, something on the order of $300 or $310 billion in education. But the question of spending that wisely is critical, and the Federal Government has the capacity and has often demonstrated this, to be a force for change in how we spend the money broadly, to use the money as leverage money, a force for excellence in leveraging and a force for equity, and I would argue that, therefore, it's not solely how much the Federal Government spends, but particularly the form of spending, and I want to come back to that in each of the cases that we've talked about.

Representative SCHEUER. How they spend it to achieve equity, to achieve excellence and to achieve change.

Mr. NEWMAN. And to leverage all that other money that's going on out there. In the elementary and secondary areas, as you know, the Federal Government only provides about 6 percent of the total resources, so it's not going to transform it through the dollars it puts up, except as those dollars provide a special extra leverage, which it can do and has demonstrated.

Representative SCHEUER. Well, that's what we were trying to do, of course, with the Elementary and Secondary Education Act.

Mr. NEWMAN. And successfully, and one——

Representative SCHEUER. To a degree.

Mr. NEWMAN. Yes. I think it has been not totally——

Representative **Scheuer**. Well, for example, we set up the Head Start program, and we thought we'd use our leverage to get something new and great started, and the Head Start program was a success from the very beginning.

Now there's a theory around that local people know best. You've heard that. Well, why didn't local people in cities and States around the country say, "Hey, this is a great program. We ought to do this for our kids." Why didn't cities and States increase access to the education system by 2 years and set up a Head Start program for their kids?

Mr. **Newman**. Well——

Representative **Scheuer**. Why, 20 years later are we still trying to figure out how we can create a Head Start experience for the four-fifths of the low-income kids from disadvantaged homes who aren't getting it? Why, a hundred years after we started preschool enriched programs, are the well-to-do kids who don't really need it, getting it? The well-to-do kids from homes that are education factories, they're in it. I mentioned to the last panel that I'm a Head Start kid. Why did I get it, while the kids from low-income homes in New York City didn't? None of them got it in those days. And even today only a fifth of them get it. After really 75 years or so of Head Start-type experience and 20 years of actual Head Start experience that proves without a doubt what a great program this is, why haven't localities around the country just said, "Hey, it works, let's do it."

You see, so even the effort of Congress to innovate and to use the carrot as a means of starting something new that will then be quickly adapted, elaborated, and extended does not always work.

Mr. **Newman**. Well, I'm going to argue, it's not quite as dubious. I agree with all the criticisms you've just made, but a couple of things about the experiment of Head Start and the whole question of how the Head Start program has worked out. I think it—in one sense, it's a very important example of the Federal capacity to experiment and prove a point. I would argue that the Federal Government could have made it move faster if it had then gone on and created another kind of carrot; namely, what it has done in several other fields, which are certain kinds of matching grants, where it goes to the States and says, "Look, this works, and we'll give you *x* dollars, if you will put *x* dollars in." Remember what you did in SSIG, in student aid. You gave a relatively modest amount of money, and it cleared a whole range of Federal student aid programs at the college level, which now grossly have gone way beyond, in dollars, any kind of matching arrangement that the Federal Government came up with. In other words, that carrot carried the second step of the process; namely, moving on to implementation, once the experiment was proven successful.

I think such carroting and such experimentation are very potent roles for the Federal Government, and incidentally, now what's happening, and this is a point I wanted to make, and your comments allow me to bring it in. The interesting thing about early childhood education is that it's coming rapidly to the United States right now. We, in the last 4 or 5 years have moved to essentially universal kindergarten. We were not at universal kindergarten.

We are now well over 95 percent across the country, in terms of children attending.

About 30 percent of the children in this country are now eligible for publicly supported 4-year-old voluntary kindergarten. In no State is it mandatory, but in a whole series of States, it's State financed at the public schools and about 30 percent of the children are eligible for 4-year-old kindergarten.

In addition to that, the earlier parts of——

Representative SCHEUER. What percentage of the low-income minority kids are eligible?

Mr. NEWMAN. Well, about 30 percent, as well, because it's pretty—it's a function. The States when they fund it, fund it for everybody. So they say, if your school district does this, we'll give you *x* dollars per child.

Representative SCHEUER. I guess it's a question of whether the concentration of low-income minority kids occurs in States where this is available.

Mr. NEWMAN. That's true, but it's coming rapidly. I mean, it's moving State by State.

Representative SCHEUER. You hear constantly that only 20 percent of the kids who need it the most get it, but what you're suggesting is, it's really a little better than that. It's 30 percent.

Mr. NEWMAN. Well, but remember, this is only 4 years old.

Representative SCHEUER. You're talking about 1-year Head Start.

Mr. NEWMAN. Yes. In addition to that, there are some other programs. For example, there's some very good new programs coming along of parental involvement like the Missouri program, that start right at birth, of getting the parents involved as educators, parents as teachers, and so on.

Representative SCHEUER. It also involves teaching parenting to the parents.

Mr. NEWMAN. Yes. So one could say the Head Start concept is finally paying off and at the local and State level things are happening, and then you'd say, well, what's the problem. And I would argue the problem is twofold. One is the question of equity that you raised, and the second is the question of quality. And let me just take the quality first.

There'a a good deal of study now about the Head Start program in itself, but there's a lot of new kinds of programs coming along, and I think one thing the Federal Government ought to do, it ought to commit itself to do, the Federal Government not only did the experiment, but funded most of the followup to see if Head Start was, in fact, effective.

I think there's a real need over the next 5 or 6 years for continuing that followup and examining the question of whether—the forms of different kinds, because there are going to be many types of early childhood education coming in. And it's in a very plastic state at this point. So this is a terribly important time for continuing study and analysis, which the Federal Government is doing.

Representative SCHEUER. And you say that study is ongoing?

Mr. NEWMAN. OEIR has put money into this, it is continuing, and we ought to encourage that. That's an important point at this particular time.

Representative SCHEUER. Where's that going on?

Mr. **Newman**. From the Department of Education.

Representative **Scheuer**. Right.

Mr. **Newman**. Mr. Chairman, in 5 years, we will have pretty well set the form of early childhood education in this country; 5 years from now it's going to be very widespread in ways that I think are very important. So it's—whether it becomes good early childhood education or poor early childhood education is going to make a great deal of difference. So the question of quality is not an assured thing at this point. So tracking that and keeping on top of that is a very good role for them.

Representative **Scheuer**. You're suggesting that if you extrapolate the curve that is in place now, in 5 years, 80 or 90 percent of the kids who need it the most will be getting it?

I don't want to put words in your mouth.

Mr. **Newman**. If things continue, it will be—much depends on what the Federal Government does, and one of the suggestions that I wanted to make would accelerate that, which is the one I was making a moment ago, is I think, an excellent role for the Federal Government, would be to encourage States to move into early childhood education through modest grants that expand Head Start and other devices. And one way of mitigating the cost to the Federal Government is State matching, which will also get State involvement in depth. Even if the Federal Government were not to do that, I think, in 5 years, 50 percent of the kids will be in some form of early childhood education.

Representative **Scheuer**. Up from 30 percent now.

Mr. **Newman**. And what will happen as a result, is that the form that we accept, the sort of norm—we have a form for kindergarten. We know what kindergarten is, and we'll know in 5 years what early childhood education is. Right now it's still—there are a lot of variations out there. And what we want to make sure is it settles into its pattern that it will begin to live with. We want to make sure it's a good pattern, not a poor pattern, because once you get a poor pattern established, as you know, it's very hard to undo.

So this is a very critical period of time for the nature and the form of early childhood education. So that the two arguments I would make about early childhood education are, one, the Federal Government ought to track the quality question and continue to research it, sponsor the research and publish that research. And second, that it, by matching grants to the States, can accelerate the process in a constructive way.

Then the only third point I'd make about early childhood education is one that in the discussion that has been going on here, and reading back the past testimony, I think I would agree with essentially all of it about early childhood education and certainly with the views that you've expressed, Mr. Chairman.

The only thing I would argue is that the value, in terms of the competitiveness of the United States has been vastly understated, if anything, and if I could just make a brief argument about it.

We've been examining the question of the least advantaged students under a major project we have on at-risk youth, and over the past several years as that project has expanded, the deeper we have gone into it, the more we have become convinced that we are understating to ourselves, the enourmous costs and disadvantage to the society of developing an underclass.

Two new things have been going on. We've talked a lot here today about dropouts. One is that the number of dropouts in this country has actually been increasing over the last 15 years. This is the first time in American history that this has happened. But the second and far more insidious thing is that there's a significant change in what it means to drop out. Now part of it has come up here. You made the point and several have made the point, there simply isn't the kind of work for people anymore that used to be there. And that's certainly true. I mean, one could go on as a dropout before and do very effectively. Now that's changing.

But the second thing is that we are developing among about a third of the kids that drop out—a significant number come back into the system some way. Some go get a GED, some find a job of some sort.

Representative SCHEUER. Just for the record, spell out the alphabet.

Mr. NEWMAN. G-E-D—general equivalent degree, the equivalent of a high school degree that you come back——

Representative SCHEUER. Yes.

Mr. NEWMAN. Thanks for the help. It proves that a college president can be constructive. [Laughter.]

And in a very important point here. But some of them come back in, but a considerable period—I mean, some go on and there are jobs still that one can do—Congressman and others—that don't require—you know. [Laughter.]

But increasingly, that's rare.

Representative SCHEUER. It's all indoor work and no heavy lifting.

Mr. NEWMAN. That's right. And there's only 435 of them. [Laughter.]

But the other side of this is that about a third of the kids that drop out end up as what I would call anticitizens. And I mean that as strongly as it sounds. And that is that people who end up on the street running drugs or pregnant at 17, aren't simply people that fail to become effective and productive citizens, they begin to absorb resources from the society. In economic terms, they burden a society trying to be competitive. If 10 percent of the people are not contributing, you've lost 10 percent of your productivity, but more importantly, they're absorbing wardens and policemen and social workers. So the cost is considerably in excess of that.

Representative SCHEUER. You know, you've really said it all in the last 2 minutes. And this is why I say that this investment in our kids of $100 billion, as Jule Sugarman quantifies it, for Head Start, to get them going successfully, to make sure that they show up learning ready at the schoolhouse door, this is a capital investment, the costs of which, if we don't make it are so awesome and so horrendous and so destructive to our society, both in financial terms and in the quality of life terms. This whole business of a two-tier society is morally offensive to us and the cost of not making this capital expenditure in developing our human talent is unacceptably high. And if people would only just start thinking of the costs of not doing it along the lines that you're describing, our Congress would very soon decide that we simply couldn't afford not to do this, not to make this expenditure, this capital investment.

You've said it all in about five sentences.

Mr. NEWMAN. What you're seeing and saying, and what you've seen is increasingly visible to the States.

Let me just tell you one brief example of it, then I'll get on to the other point I want to make.

We've been meeting with the city of Los Angeles on some of their problems with at-risk kids. They've got into it from another point. They asked us to sit down with them because they said, "Look, we've got 70,000 kids in gangs." We said, "70,000."

Representative SCHEUER. 70,000 kids in gangs?

Mr. NEWMAN. 70,000. And I said, "Wait a minute. You got to be kidding." And they said "70,000." And I said, "This is incredible," and they—I'm talking about the district attorney's office. Then we got into the discussion about it. I said, "Well, how many of these are really dangerous kids?" And they said, "About half or about 35,000 are armed." And I said, "Armed?" And he said, "With everything up through Uzi submachine guns." And he said, "I'm not kidding you." He said, "This"—and they showed me the gang killings which go like this. They're up over 800 this year.

And then I said, "How many armed policemen can the city of Los Angeles from all jurisdictions put on the street?" He said, "About 28,000 or 29,000." I said, "You mean, they outnumber you?" He said, "Yes." And this was about 2 months ago. And he said, "No one cared as long as they were shooting each other, but when they shot that young woman at UCLA, then people began to notice that all these killings were going on."

And then he said—this is the district attorney. He said, "The thing"—and this is why they were so interested in early childhood education, in the district attorney's office. Then he went on and said, "But this is really going to come unglued the first time they shoot a policeman, because after that the bars are going to be down."

Well, since that time, they've shot a policeman, and the way that they did it, was a gang member walked up to a police car and pulled out from behind his back an Uzi submachine gun and just riddled the policeman.

Now, how are you going to make a city in America work when there are 35,000 armed people that don't happen to believe in your system? You can't say, "Would you please all stay in this area and shoot each other."

Now on Monday of this week, I was down meeting with the legislature in Florida. The speaker of the house got all the house members together for a retreat to talk about major issues, and one on the list was at-risk kids, for all the reasons we're talking about, including the fact that their background paper they put together said it costs us $15,000 a year to incarcerate. We expect in the next 6 years to increase the number of people incarcerated, even though it is very high in Florida, by 47 percent. We're going to spend $1.4 billion on prisons. Here's what we're doing. We can't afford this.

So everywhere you turn, the answer is we have to get at this problem, and that's becoming visible, and this is why I say it's going to come to the United States. Now the question is, let's start addressing these problems, front end to rather than on a crash basis.

Can I turn to the second point? I'm sorry.

Representative SCHEUER. Yes. And tell us something about what you think would be the best way for us to reach these at-risk kids. Is extending the education system in both directions a relevant approach to the special problems they present to society?

Mr. NEWMAN. We put a major effort into examining these at-risk kids, and we said—we got all the researchers in the country that we could find that knew anything about it and talked and went through it all, did all the analysis. Then we got all the organizations that have been working on this and put them all in the same room and made them vote on what worked, because we figured if they voted, they'd follow up and do something about it.

We agreed on five things. Early childhood education, it's clear. Everybody agrees. These are all unanimous.

Representative SCHEUER. That was numero uno.

Mr. NEWMAN. That was numero uno.

No. 2, and I think is actually the most important, is to turn schools around so they become exciting, interesting places. Schools, particularly for at-risk kids, are boring, difficult, bureaucratic places that——

Representative SCHEUER. Particularly which schools?

Mr. NEWMAN. Schools for at-risk kids. And also many of the schools send off a signal which was alluded to earlier. They send a signal to the kids that says you cannot learn. We don't expect you to learn, and that turns the kids off.

The third thing is mentoring of kids. And someone mentioned, I think earlier, Gene Lang's program, which is essentially a mentoring program. He offered them the money to go to college, but what he really did was hire someone who mentored those kids and met with them every week. Mentoring of one sort or another, and with two of the presidents that are here and others around the country, we are in the process of creating a network of universities and colleges who are getting their students into mentoring at-risk kids as a vehicle for getting at this.

Parental involvement, even if it's a teenaged, unmarried parent. And the fifth thing is——

Representative SCHEUER. Including some instruction on parenting.

Mr. NEWMAN. Absolutely. And drawing them into the schooling process, drawing them into early childhood education which, of course, Head Start does.

Representative SCHEUER. Of course, that whole question of drawing them in is something that's extremely difficult. Some of these parents seem to defy all efforts by the school, the principal, the teacher, everybody, to involve them in their kids' education.

Mr. NEWMAN. But you know, it's amazing, where schools really make the determination that they're going to draw them in, they do draw them in, and it requires a school confident of itself, enough teachers believing that they're part of the process. When you have a bureaucratic organization, and the prime rule for the principal is not success with the kids but avoiding problems downtown, this is not a school that is going to go out and say, you, as a parent, have to come to this thing. They don't want to see the parent.

But when you have a school that says every kid can learn and every parent can help, and we need your help, even in the worst circumstances, we have schools all around the country that are doing this. Now the trouble is, it's only a fraction of the schools. It's enough to prove that it's not a sport, but it's not enough to solve the problem.

Representative SCHEUER. Well, thank you very, very much, Mr. Newman. Your testimony has been marvelous, and if you feel you have to leave, please feel free to do that.

Mr. NEWMAN. I apologize.

Representative SCHEUER. OK, no problem.

[The prepared statement of Mr. Newman follows:]

PREPARED STATEMENT OF FRANK NEWMAN

It is a privilege to be able to testify before this committee, particularly on a subject as important as preschool education for American children. Let me begin by arguing that it is important to think through what the nature of the federal role ought to be in this subject. What is it that the federal government can do best?

Now more than ever there exists a better opportunity for the federal government to work in partnership with the states. Over the past seven or eight years the states have become powerful advocates of education reform. There is no state that does not have some form of a major education reform program. In most cases the reforms that have been undertaken in the last six or seven years have been the most powerful efforts in reform ever undertaken in those states. Surely there is no point in trying to supplant this energy with federal efforts. The states are the source of the bulk of the money for education. That share has now increased to 51% of the total national expenditure for elementary and secondary education. Forty-three percent of this funding comes from local and private sources, and 6% from federal sources. In addition the states provide a majority of the policy making efforts.

None of this should be construed as an argument that the federal role is not important. It is terribly important. The federal government can and must be a powerful force for change, a force for excellence and equity. Nor is this an argument that we should think about such an issue primarily in financial terms. It is, of course, not solely a matter of resources. The issue is not whether the federal government can provide more money, though, of course, funding is always important. Rather, the issue is can we make better use of the $328 billion we are already spending on education in this country. To achieve its promise, the federal effort needs to be focused on having the government becoming a force for change. Federal funding needs to serve as a leverage for such change, either on the part of states or agencies involved in education. Federal efforts must also be focused on research and demonstration. In funding that leverages change on the part of states and education agencies and in research and demonstration, the federal government has a long and successful record.

When it comes to what should be happening in preschool education, it is important to bear in mind that a great deal is already happening. For example, in recent years we have moved toward a system which is providing essentially universal five-year old kindergarten. It was only a short time ago that only 85% of the youngsters in this country attended kindergarten. Now it is rapidly becoming the norm to provide kindergarten for four-year olds, though at this point almost always on a voluntary basis. More and more states provide funding that allow school districts, if they so choose, to hold four-year old kindergarten for those parents who wish to send their children. State funding is now available for approximately 30% of all four-year olds in the country, even though not that many school districts or parents choose to participate in such programs. Nonetheless, in a relatively short time four-year old kindergarten will be as common as five-year old kindergarten was only a few years ago.

In addition, preschool for the years prior to four years old is developing rapidly across the country. The states have been active in the financial support of many such programs. Private corporations and community groups have also been involved, and a great many people have simply found informal or private arrangements for their children. The issue is not whether or not we will have preschool education, because we in fact already have a great deal of that form of education taking place. There are primarily two questions to pose. The first is whether we are to have preschool education of high quality, and secondly, whether its availability will be on an equitable basis. Will those who need it most receive it, or will it become one more advantage that only wealthy families have?

One thing we know with regard to quality is that the involvement of parents is important. A number of states have begun programs that involve the parent as early as possible. Missouri, which serves as a prototype with its program, Parents as Teachers, initiates parental involvement as soon as the child is born. Employees of the Department of Education call on all families who volunteer for the program to help them learn how to be effective parents (or parent), supply them with useful learning materials, and encourage adequate health care and nutrition for the newborn. The Headstart program proved that same point. The involvement of parents in preschool can substantially add to the child's developmental growth, to say nothing of the good it does for parents themselves.

We have learned a great deal from research in the field of early childhood education, and particularly programs such as Headstart and others like it. I would urge the committee to have this information documented and summarized for its deliberations, for there is no reason not to take advantage of what we have already learned.

In terms of equity, the federal government has a long and highly regarded role in equalizing the chances for disadvantaged youth. The argument that I want to make is that this discussion so far understates by a vast amount the financial, social and political cost to society if we continue to fail to address the problem of at-risk youth. Since the beginning of the reform movement the majority of American students, regardless of ethnicity, are doing better in school. These data, unfortunately, mask the fact that there is one group of students which is doing considerably worse.

Some years ago the Education Commission of the States began a major project on at-risk students. We were stunned to find that the high school dropout rate which had dropped to a level of 22% twelve or thirteen years ago, had gradually climbed back to close to 29%. Of course, some of these students are really "stop outs" ie, they return to the educational system to get a GED, or go on to community college, or to a job training program. Some, in spite of their failing to return to some formal type of schooling still end up effectively assuming a role in the job force. This, however, is getting harder to do without at least a high school degree. More and more employers do not believe that an enterprise can function effectively with people who have failed to graduate from high school. The military, which has long been our traditional receptacle for young men who have failed to graduate from high school, no longer will take people without a high school diploma. The problem for the undereducated, in other words, is becoming steadily worse. More are dropping out, and the prospects for those who do are getting steadily worse. This set of circumstances is compounded by the rise of an entirely new phenomenon which I shall call the anti-citizenship lifestyle.

It appears that a growing and now significant proportion of the dropouts, our estimates would be something on the order of a third of them, or roughly ten percent of the age group, drift into a lifestyle that is not only highly unproductive but could be more aptly described as a form of anti-citizenship. They are not likely to work on any kind of a regular basis, and are likely to be involved in crime, drugs or teenage pregnancy. The values they espouse are often values antithetical to society at large.

The cost to society for dealing with the disruptions caused by these individuals is enormous. One way to look at the effect of this phenomenon is to view such young people as a drag on our ability as a nation to be competitive in an increasingly difficult international environment. If we are forced to carry the burden of ten percent of the workers who are not actively employed or are underemployed, we naturally suffer an equivalent competitive disadvantage in our national productivity. And this is not the entire bill we pay for the this growing problem. We must add all of the people, social workers, wardens, and policemen who are required to deal with this growing number of counterproductive citizens.

As an example, a few weeks ago I met with the Florida House of Representatives at their annual retreat. We discussed at some length programs for dealing with at-risk youth. The point was made that it costs $15,000 a year to incarcerate one young man. The number of young men in jail is up 47% over the last six years. The annual bill is now approximately $1.4 billion. Add to that the growth of gangs, which are spreading across the United States, and one can see how difficult a problem this has become.

Beyond that, last year 21.6% of all live births in this country were to unmarried young women. What we are doing, in short, is developing a larger and larger group of people, who are harder and harder to educate, whose values do not even come close to meshing with the values of the broader society. Many of these young people, and certainly the worst of the problems, exist in the urban centers. What makes these areas so difficult to contend with is that the young people who live there exist in sections of the community that seems to have lost the capacity to support any of the central values of a democratic society. The problems of teenage pregnancy, drugs, unemployment, and dropping out are certainly of significance in rural areas and certainly not unknown in our suburban communities. But it is in the urban centers where they reach their most potentially disastrous point.

When these phenomena are carefully considered, one must, of course, ask questions which go well beyond whether the U.S. can be a competitive world power with such a large part of its population in such an unproductive mode. Of critical concern is whether we can bear the cost of this without distortion of our social and political system. Can our cities or our society as a whole survive with the continued growth of a counterproductive underclass? How do we face the problem of dealing with a group of people in our society who have no stake in the success of the society itself?

After the work we have done in our at-risk project I am convinced that the most important single way to address this troubling and demanding issue is through the process of education. Wherever we have seen effective education programs, even the most hardened cases of children have been turned around. We have discovered that at least five things appear to work: 1.) the restructuring of schools so as to make them more exciting learning centers, 2.) the involvement of parents, 3.) the coordination of the school with other social service agencies, 4.) the mentoring of at-risk youth with older students or with adults and 4.) early childhood education.

Keeping this in mind, then, I think this is not only an appropriate time, but an urgent time for this Congress to give consideration to what the federal government can do to accelerate the process of early childhood education, particularly for those least affluent and in danger of becoming at-risk students.

Representative SCHEUER. We're going to hear from Donna Shalala next, but first we're going to have a 3-minute recess.

[A short recess was taken.]

Representative SCHEUER. We'll now go to Donna Shalala, in view of the infrequency of planes to Madison, WI.

Donna Shalala has a résumé that is awesome. She has been chancellor of the University of Wisconsin at Madison, the fourth largest university in the Nation, since January of this year, and she has an extraordinary record of public service, including serving as vice president of the Children's Defense Fund, vice chair of the Committee for Economic Development that issued the report, "Children in Need: Investment Strategies for the Educationally Disadvantaged."

And above all else, as a New Yorker, I would have to say that one of her great accomplishments was her presidency of Hunter College, which she brought to a superb level of excellence, and besides doing that, at the same time she was president of Hunter College, she had a marvelous impact on the city through her innumerable leadership activities in and around New York City.

So, Donna, I stand back in awe of your accomplishments. I'm very grateful that you came to testify with us today, and please take such time as you may need. Please proceed.

STATEMENT OF DONNA E. SHALALA, CHANCELLOR, UNIVERSITY OF WISCONSIN AT MADISON

Ms. SHALALA. Thank you. It's very nice to see you again, Congressman Scheuer. And I did read through the previous testimony which is very impressive.

I think what I'd like to do is just make a couple of points and then answer some questions that I know you have.

Because of the long discussion that's already been held on early childhood education and because I've spent much of the last 5 years on a series of panels which have helped to focus educational leaders on a new strategy for us, and that is looking at very early childhood education as a place to intervene in a powerful way for disadvantaged children, I'd like to caution the discussion a little bit about the Head Start program.

No one is more committed to Head Start than I am, but I don't think that we ought to mislead ourselves about that program carrying the burden of early childhood education. And what we've learned over the last 5 years as we worked through the reports and worked through the research on this topic is that if we're going to do something about improving opportunities for disadvantaged and minority children in this country, it is not simply a Head Start program but the WIC program, the prenatal care programs, access to Medicaid, early immunization programs for low-income kids, child care, and teenage pregnancy prevention.

So I want to talk about the integration between the health——

Representative SCHEUER. And of course, the Follow Through program.

Ms. SHALALA. Yes. There exists an interrelationship between the health programs, the social service programs and the education programs as a package to make a difference for low-income young people. It is the package of these programs put together in a powerful way with a very different kind of school program that is the kind of reforms that Frank Newman talked about, that we talk about extensively in the CED report, a different school that takes a young person who is better prepared from that Head Start program and from those health programs that we believe will make a difference. So it is not a single program, not a single remedy, but rather the interrelationship between those programs that we think will make a difference.

We also think research suggests that only through those interrelationships will it make a difference for young people. A young person with serious health problems going into a Head Start program will not get a headstart. A young person who is a product of a teenage mother who doesn't have much hope herself, that the Head Start program alone without the health programs and without opportunities for that teenage mother, will not make a difference. I would recommend a look at the new programs in Harlem and East Harlem in the centers up there that are the work of the Citizens Committee for Children and a number of the other programs, including Hunter College, that provided opportunity and hope for teenage mothers in going on to college and the teenage prevention programs in New York City as examples of some of the things that really do make a difference.

The second point I'd like to make about early childhood education is the point of why do those of us in higher education now come and talk about early childhood education. I'd like to make as strong a statement as I possible can on this. We believe that the future of higher education is inextricably bound to what happens to poor children in our society. Unless we do something now about the poorest children in our society, a great research university like the University of Wisconsin at Madison does not have much of a future. The resources will not be there, we will not have a diverse student population, we will not provide opportunity, not only to young people from Wisconsin but young people across the country.

So the fact that higher education is now willing to talk about elementary and secondary education, about reform in that system, goes beyond the moral argument. It is really in our self-interest as a country, and I think if anything's happened in this country, the combination of higher education joining with our great public education system in arguing for these programs really ought to make some difference. That, combined with new constituencies like the business community, will be very helpful.

Second, you've asked a series of questions about improved access to higher education, which is obviously the business that I'm in, and I would like to talk about the loan programs and about the grant programs.

It is clear from statistics that we have become increasingly dependent on loan programs. The grant programs have not kept up. It is a serious problem for disadvantaged youngsters. They, minority and other disadvantaged youngsters, are very reluctant to borrow money to go into higher education. Our competition now for young people, particularly minority young people who are graduating from high school and who could go on to 4-year colleges, is the military. They perceive the military as not getting them into this deep debt situation, as providing this kind of skill training that they may have, as providing an opportunity to save some money for higher education.

Representative SCHEUER. Literacy training, too.

Ms. SHALALA. Pardon.

Representative SCHEUER. Literacy training, too.

Ms. SHALALA. And literacy training.

And the military now is perceived as a merit system in a very different way than higher education is perceived. If we are dependent on loans for low-income young people, we are simply not going to be able to attract them to higher education.

Recognizing that, the University of Wisconsin at Madison established last year, as part of our strategy, something called Fast Track. This program took the Federal money and some State money, plus some grant money that we had, scholarship money, and put a whole package together for low-income young people, that included a job. In that package, there was no loan the first year and not more than $800 in loans during the 4-year period in which the young person would go to college. This is for very low-income young people.

About 40 percent of the young people who came to the program and came to the university were minorities and another 60 percent came from rural areas and small towns around Wisconsin who would not have had access to higher education, if it wasn't for that package.

The difference was the absence of loans and a guarantee for the 4 years. The education requirements were the same access requirements for the university. They had to keep their grades up, but no higher standards than we have for young people, which is my second point.

I think it would be a serious mistake to mix the income question and disadvantaged question with higher academic standards than we have for other students, and I believe that if young people meet the regular rate of progress standards for a university, that we ought to focus the money just on their need, their financial need, not on some separate set of academic standards. We started out in this country with a higher educational system that provided access to the rich and to the very bright poor. What we need is an opportunity for young people who are eligible for higher education, not just because they're bright, but because they're bright enough to get into higher education. And we ought not to have a separate standard for the poor than we have for everybody else in our society.

We need young people who are poor and are in the middle in terms of academic ability, clearly qualified for higher education. Therefore, I would not create a separate tier of academic standards. If they're eligible for admission at the University of Wisconsin, they ought to be eligible for a financial aid program that will give them access to the university.

Representative SCHEUER. And it doesn't include very much in the way of loans.

Ms. SHALALA. And it cannot, particularly in the first couple of years. Our experience now is that if you put that kind of pressure on young people, the kinds of backgrounds that they come from, it scares them away. While there may be a loan piece, it's very important if we can keep it out for the first couple of years.

We also know that young people are taking longer to finish their higher educational experience, because they're starting to work. All young people, whether they come from middle-class backgrounds or from low-income backgrounds, and therefore, keeping the loan part down is terribly important. It's a very good investment. It's a particular investment for disadvantaged young people. What we want for young people is for them to have a choice between institutions, to make an educational choice, not a financial choice. What I fear is that they're going to make compromises, both in what kind of institution they go to, but more importantly, in what kind of profession they go into, on the basis of their financial ability.

We need gifted young people to go into teaching. They won't do that if they carry heavy loans. We need gifted young people to go into nursing, to go into medicine, and to practice in different areas in this country. And what opportunity, real opportunity means, is that we eliminate financial choices on the basis of profession or kinds of institutions. And while my institution might benefit because it is relatively low tuition or the City University of New York which I came from, it is not in the interests of this country to have young people make those kinds of financial choices.

And finally, just a couple of specific words about the kinds of programs we're talking about. We're clearly talking about programs which need regular annual increases, about the supplementary educational opportunity grants for high-need students, about college work study, which is enormously successful in this country and needs additional appropriations.

All of those programs, the range of programs, need to be strengthened, if we're really going to give qualified students access to higher education.

One final word on minority students. While I am totally sympathetic to the goal of extending downward and upward, in terms of the goal, what troubles me in this society is we really don't have entitlement to the public education system. With the dropout rates that we currently have, we do not have a public education system that clearly provides opportunity to every young person to graduate from high school, and therefore, I want to do that first. I want to deepen our involvement in elementary and secondary education, to make sure that that system is fully organized, so that every young person, whether they're disadvantaged or minority or majority, have a clear opportunity for some targeted opportunities in higher education. That ought to be our commitment as a country.

You asked earlier, why is it that States and cities didn't start these early childhood programs a long time ago. It has always been my view that little kids have no clout in this country, that no one is their advocate except perhaps Congressman Scheuer, and that it's time that little kids had all of us as their advocates, that they really are our future, and we need to make them our priority. They really are our best defense in this country, and that opportunity for them really will make a difference to the rest of us.

I have said some things in my testimony about Federal support for research, which is an interest you and I share, and I'd be happy to answer questions on that, but that is in my prepared statement which I've handed in.

[The prepared statement of Ms. Shalala follows:]

PREPARED STATEMENT OF DONNA E. SHALALA

That the federal government plays a vital, irreplaceable role in the education of our children - from nursery school to the university - is unquestionable. Since the establishment in the 19th century of a free, public education system that owed no allegiance to religious affiliation, and the creation in 1862 of land-grant universities that allowed the broadest possible access to higher education for those whose ambition outstripped their economic advantages, the federal government has functioned as one of society's stewards for the preserving of our most critical national interest: the minds of our nation's future.

But the nature and breadth of the federal role now is at a crossroads.

Since the sweeping mobilization of federal resources to provide an educational future to our poor and minority citizens under President Lyndon Johnson in the early 1960s, the federal government has not taken a leadership role. The basic outlines of the Great Society programs remain in place, but their influence and effectiveness has withered. While liberals and conservatives seem recently to have joined hands in endorsing an educational agenda that would allow the United States to keep pace productively with other nations, the least advantaged citizens, as usual, have been left out of the reckoning - even though it is their children who will make or break the country's economic future.

In spite of relative slight growth in numbers, programs that offer student aid and assist the handicapped have suffered; they may have kept pace with projected figures from earlier in the decade, but they have not kept pace with need. Programs that support research institutions and serve disadvantaged school-aged children, on the other hand, have lost ground by any objective measure. And the serious, nationwide drain on qualified teachers, coupled with the upturn in the number of school-age children, creates an unsettling equation.

Under our new administration, with a new Secretary of Education on board, we need to take a serious look at the federal role in education - from a "bottom up" rather than a "top down" point of view. Greater access to the riches of higher education for all children, and greater capabilities on the part of the nation's colleges and universities, are fundamental goals, but absent the nurturing and preparation in the early years, those goals become moot.

Our responsibility to children who are poor, and often minorities, must begin long before school. It must begin before birth.

If compassion cannot dictate this necessity, pragmatism must. Our future productivity, and our future harmony, as a society, depends on providing a productive future for these children. The United States cannot hope to compete in the global arena, as the recent Committee for Economic Development Report made uncomfortably plain, when one-fifth of our children live in poverty and one-third grow up in ignorance.

President-elect Bush has made the commitment to strengthen our Head Start program, a magnificently cost-effective program that has proved its worth in making its graduates three times less likely than their peers to drop out of high school. That's a worthy promise, but a deep commitment to our most disadvantaged children, one that will mean results in a few years instead of a few generations, requires more.

We must marshal our resources, strengthening the WIC food program for women, infants and children - where it has been proved that $1 spent on nutrition saves three times that in future hospital costs. We must improve the delivery of prenatal care, the access to Medicaid services and early immunization to the childhood diseases that can cripple young minds and bodies. Surely, these things are the birthright of each and every child born under our flag. When the time for school comes, the programs must be in place. Fewer than 1 in 5 eligible children now participates in Head Start, even with the evident gains that year or so of early education can mean.

We must make summer programs and compensatory programs available for those districts where children need them, and in so doing fend off the dulling of skills that takes place when children do nothing but stare at television during the summer. We must make our youths employable at graduation by giving them access to employment and training programs before they graduate. We must hammer away at the threatening possibilities that arise when three million of our young people, under 21, cannot find useful work.

The need for productive, responsible, cost-effective support from the federal government does not end with secondary school. The role of the government in arming this nation with future leaders extends into their young adulthood. While no one suggests a magic carpet ride for those students who have resources, or parents, able to fund their college educations, it's a simple fact that we are not the nation, demographically, that we were 20 years ago.

The so-called two-paycheck prosperity and the increasing dependence on short-term loans means that today's college students have parents who are operating at the limits of their financial ability. College costs have risen, but, because of their own cost burdens, institutions have been increasingly unable to offer financial aid to incoming students. The inability of graduates to repay their federally-guaranteed student loans is a matter of concern. Yet it is counter to everything our country's moral structure represents to deny post-secondary education to a student who can make the grade.

In keeping with that belief, over the past two decades, the federal government has become the largest contributor to student aid. Almost 80 percent of total assistance now comes through federal programs, yet student aid has failed to keep up with college costs. The focus in student aid, moreover, has shifted from grants to loans. Grant aid per student peaked in 1975-76 and has steadily declined - by more than half in scarcely more than a decade. During the same time period, the average loan per student grew by 123%. Still, students availed themselves of the chance. Only a third of degree recipients a decade ago had college debt; but in 1983-84 nearly half of them did.

And the figures continued to rise for 1987 baccalaureate recipients. Their average debt may be a staggering $7,500. And what about those students who enroll, incur debt, and then drop out under the weight of costs before earning the degree that, ironically, would help ensure their ability to repay the government?

Such a structure, clearly, can result in the actual isolation from assistance programs of those students who need them most. And they discourage all students from career choices that could put them at the forefront of discovery, such as teaching, doctoral study or public service, upon graduation and drive them directly into the arms of the job market.

The prospect of incurring a $7,500 debt before ever entering the work force would discourage anyone; how much more does it discourage needy students who have struggled their way to the steps of a college education, only to find those steps pose yet another serious obstacle.

The disillusionment that scarcity of financial aid engenders among capable but disadvantaged students need not be estimated. The proportion of minority youths entering college when aid was more available - from the mid 1960s through the mid 1970s - increased. But it levelled off, as aid grew scarce, and then decreased, according to federal statistics. This has happened just as rising college costs have caused even middle-class students and their families to re-evaluate the cost and quality of a college education.

If policymakers mean what they continue to say about the role of education in economic development and international competition, the role of the federal government in educating our neediest students, from preschool through college, can be ignored only at our national peril. We need an increase in grant funding for low-income students; as well as programs that provide that such undergraduates receive grants instead of loans for the first two years of their educations so that a fear of debt will not discourage them from trying their wings. Once they have developed some degree of self-assurance, it can be reasoned that students would be less intimidated by the process of taking out loans. The basic foundation of the aid structure, the Pell Grant program, needs to be strengthened in order to provide regular annual increases in the grant maximums to keep up with rising costs, and full funding so that no eligible students have their awards reduced.

We also need to increase funding to the Supplemental Educational Opportunity Grant program, so that students with very high need still have a choice of public and independent institutions and are not limited to the lowest cost institutions. But there are other important programs that can be shored up to benefit students.

College Work-Study programs mean that students need not go into debt to support their educations; and they mean that the taxpayers' money is spent in two very worthwhile ways: to assist students and to assist those non-profit or institutional settings where most work-study students do their work. More college-based programs, that allow individual institutions to be sensitive to the particular needs of their particular students, need to be put in place.

It seems clear that only by rebuilding these kinds of incentives, for which appropriations have lagged behind inflation throughout the 1980s, can we really increase the number of minority students in our undergraduate and graduate programs - thereby meeting equity goals and insuring that our nation develops the talent to meet the needs of the scholarly and technological professions in the coming century.

But those ends require means that do more than insure access to a secondary education. Those ends require the highest quality research facilities we can provide, and the federal role in funding such institutions is not insubstantial.

Research universities are the great engines of knowledge in our society, and the public good relies on their discoveries. Most of the basic research in this country is conducted at universities; this is a fact, and it's entirely appropriate. Private industry cannot take over this service. First, industry cannot be assured of the immediate return on the dollar it needs to make pure research cost-effective; and perhaps more importantly, the discovery of knowledge must not depend on the price that knowledge will command in the marketplace. Our universities cannot meet the expectation of providing the scientific and technological personnel vanguard of tomorrow - as well as discharge their responsibilities in research and education - without increased support.

But just as these crucial expectations have become painfully clear, the federal government is seeing the results of its skimmed-down support approach to research. Facilities are aging; up-to-date equipment is missing from classrooms and laboratories; and most alarming of all, there are critical shortages of faculty members in the most important field of science and mathematics - and as a result, fewer graduates in these vital fields.

Federal support for university research peaked 20 years ago, the year the United States put an astronaut on the moon. It reached a low point in 1978, rose in 1979 and 1980, then declined steadily throughout the 1980s. While the most recent funding increases have been well received, they do not address the real needs of our research universities.

Perhaps the most serious consequence of this trend has been the deferral of modernization of research and instructional facilities at our pre-eminent research universities, such as Wisconsin. During the '80s, state-of-the-art facilities were outmoded by rapid technological change; lack of funding for maintenance caused existing instrumentation to fall into disrepair; and talented researchers opted out of the university environment. The very homes of research - laboratories - were not refurbished, so that the most sophisticated work, such as microelectronics, which requires air 100,000 times purer than room air and floors free of vibration, necessarily suffered.

All these factors combined mean that a potential shortfall of hundreds of thousands of trained professionals by the turn of the century exists. It is not theoretical; it will exist unless the need for excellence in the provision of scientific and technological education is achieved.

To catch up, to turn the tide, we need to make a firm national commitment to retool our research infrastructure - the very heart of our greatest research universities. We can no longer ignore the consequences of underfunding an academic research structure. We need to return to the bright, strong vision of the shared responsibility of the federal government and universities in the development of knowledge.

A modest, but important first step is the National Science Foundation Authorization Act of 1988. That authorization includes 80 million dollars for academic research facilities modernization in 1989; and 125 million for that purpose in 1990 - topping out at 250 million for modernization in 1993.

Those funds, if appropriated, will only begin to address the needs of research facilities that have been too long deferred. The short-term spending will be significant, but the longterm savings will be immense.

In sum, we must undertake a plan in which the federal government resumes its active, profitable role in the protection of every one of our children's minds and opportunities from cradle to mortarboard. A resumption of a strong federal role is in the interest of our nation as a global force and each of our citizens. It is only when each of our children - without respect to race or economic background - grows up strong and nurtured, offered as much access to learning as their individual talents permit, at academic facilities competitive with the very best the world can offer, that we as a nation will be able to rest assured of our position as power in science, industry, defense and human welfare.

Representative **Scheuer**. Well, thank you very much, Donna.

You don't like loans; you do like grants; you do like scholarships. Do you consider it a viable and reasonable goal for us to say that we're moving toward a society where an education system starts with the first year of Head Start in the third year of a child's life, and it goes through postsecondary?

Ms. **Shalala**. Absolutely. I mean, I believe that countries like America ought to have big dreams and big goals and that we ought to work toward those goals. While I understand the financial implications of all of that, as a society and particularly using the Federal Government as the bully pulpit, those are the kinds of things that we ought to be headed toward as a society. We know that with the rate of program in terms of technology, people are going to need something beyond high school, in terms of being able to be productive members of our society. So we ought to be realistic——

Representative **Scheuer**. Between one-half and three-fourths of all the jobs that are being created between now and the end of the century will require some postsecondary education.

Ms. **Shalala**. That's exactly right.

Representative **Scheuer**. And a third of the jobs will require 4 years of college as compared to 22 percent of the jobs now that require 4 years of college.

So the need is perfectly clear, but we don't seem to be creating a system or an apparatus that encourages the flowthrough to college of kids who would benefit from it, and much more important, who would enormously benefit our country by getting it.

You may have been here when I talked about the cost-benefit study that our subcommittee just did of the GI bill of rights. Forget the benefits to the individuals and just look at it from the point of view of the benefits to society. That was an investment, a capital investment we couldn't afford not to make. And when we begin to think in those terms, then this hundred billion dollars of investment in Head Start will also be an investment that we can't afford not to make. It is unconscionable that 40 percent of the low-income minority kids who are doing well in high school can't afford to go to college and therefore do not go. We'll soon begin to understand that that is a waste to society that we cannot endure. Excluding those kids from postsecondary education is an unconscionable public policy decision. And it's just as unconscionable an economic decision, that we're making every single day—not providing the financial wherewithal to get those kids into a clear, predictable, expectable track through college, if that's what they want.

Now the question is, How do we produce the apparatus to do that? And I'm sort of like the kid who's looking at the horse and the rider, and I'm saying the king is naked. I mean, if you look at it, if you go up to Mount Olympus, and you just look at this whole scheme that we have, it's obvious that we need kids who are college capable, who are postsecondary school capable, to enjoy the expectation of going through a postsecondary experience and the expectation gives them the hope and the confidence and the drive and the will to make it through high school, even though conditions may not be perfect. Then why aren't we getting on with it as a society?

And I would like to ask you, Donna, how do we do that? What changes do we make in our present system to move toward the goal of an educational system that goes from K minus 2 to plus 16?

Ms. SHALALA. Well, obviously, different levels of government take different responsibilities.

The first thing we have to assume is that we cannot have a neat system unless we're going to redesign the whole thing, which we're probably not going to do. Whatever we do must take advantage of the richness of the current system, and that's why, as we look at what the Federal role is, which I believe, very strongly, is in early childhood education, and then ends up in postsecondary education. These programs that we're talking about, a set of programs to get young people, get children, essentially, set to go into our school system is helpful.

Second, a number of the papers talked about the bully pulpit of the Federal Government, in terms of educational reform, and we're clearly seeing a great debate going on in this country which continues about the nature of the elementary and secondary system, parental involvement. I said to Frank Newman, I don't know a school for disadvantaged young people in this country that works that doesn't involve parents. One of our findings in the research is the ones that work involve parents. It may require school officials to learn how to speak Spanish to involve parents. It clearly requires many of us to have different kinds of sensitivity, but the ones that work clearly involve the parents.

When you get through that system and the kinds of reforms that people are talking about, whether it's school-based management or more parental involvement or a strong teacher corps, a group of teachers and more professionalism and autonomy on the part of the professionals in the school system, and you get to the higher education system, and with three college presidents here who represent very different systems who have significant contributions to make. I lead one of the great research universities in this country, but I have enormous respect for what my friend, Audrey Cohen, does in the College for Human Resources, which is just as important as what I do with a different population, a different set of goals. The Federal response in terms of financial aid has to recognize the needs of the institution I lead, as well as hers. It can't be so rigid. It's got to have a flexibility that absorbs these different kinds of needs, whether it's Towson State or the College for Human Services or the University of Wisconsin at Madison.

It's the flexibility of the Federal role, it's recognizing that we have young people that need opportunities not just for their job but for their third job, as they move on, and it's the ability of a national government to have that kind of flexibility it certainly has to have in the other problems it runs to recognize the difference in federalism.

I think that we can make it work, but it sure requires a lot more imagination than we have to date, and I don't know of any way to do it without spending some more money too.

Representative SCHEUER. Well, I would only just change one word. Instead of "spending some more money," I'd say "investing some more money."

Ms. SHALALA. Fair enough.

Representative SCHEUER. And I think you'd join with me in that. And you're saying, go with the system that we have, use the Federal presence in a lot of interesting and stimulating roles.

Ms. SHALALA. The structure that we have is different kinds of institutions. It doesn't mean our institutions don't have to change. We need some fundamental changes in higher education to be able to really provide opportunities to minority students, for example. Higher education is way behind some other parts of our society in hiring of minority faculty and staff and the kind of support systems that we need, not only for minority students but for low-income students in general. We're organized for a different population, and those kinds of sensitivities we're beginning to introduce and to think about with some pain, I should note, in institutions across the country. And my view is that we will change. We will change our institutional behavior, because we believe we cannot provide a first-rate education in a setting that is not multiethnic or multicultural, and that in the next decade higher education will go through those changes, as will elementary and secondary education.

What I mean by the structure is that we have different kinds of institutions, not that we ourselves won't change in response to these goals. We will be going through changes, and in fact, we can't survive unless we go through them.

Representative SCHEUER. If you had to describe the two or three most important changes that we could make in our elementary and secondary education system and in our higher education system to enable low-income minority kids to get through elementary and secondary schools and to have access to higher education and benefit by it, what would your wish list be?

Ms. SHALALA. That's interesting. My first wish list—obviously, I could talk about the programs. We have to believe in those kids. We have to send them the message that we have high standards for them, but we could believe that they could succeed. If anything, we have to instill in them the self-confidence, that we don't care whether they're black or brown or whether they come from a disadvantaged neighborhood, that we believe they can make it in this society, that we have high standards for them. It's transmitting our high expectations and an educational structure that keeps sending that message.

What Gene Lang has done is important because it has a goal at the end which is higher education, but the secret of Gene Lang's program is not just the rich people who bought the higher education and have some interaction with kids, but every single one of his groups of young people have a full-time or a part-time social worker, usually, who interacts with those kids, someone that keeps on them.

Representative SCHEUER. Plus Gene Lang himself and his wife.

Ms. SHALALA. Yes; exactly. But it's lots of adults who believe in these young people, and we have to transmit that message. So it's a support system, but also the kind of enthusiasm for their future and a sense that we, as a society, really care about them and have high standards.

So I'd begin with that. And then a package of programs which includes child care, and I'm very interested in the ABC bill, as you probably know, since I'm deeply involved with the Children's Defense Fund. It is a package of programs with teenage pregnancy prevention, access to Medicaid and the Head Start programs put together to get children going. School-based management giving more opportunities and strengthening opportunities for teachers to play a role in the governance of their schools. That will make all the difference in the world. Work-study programs at the high school level. One of the things we know that holds young people is a combination of work-study opportunities, and in higher education, we need to go through the kinds of institutional reforms to eliminate racism and sexism in our institutions and to demonstrate that there is no inconsistency between institutions of very high excellence and opportunity, and that involves both what we do in our hiring but also the attitudes that we transmit in terms of opportunity both for our faculty and staff as well as for the young people that we bring to our institutions.

Representative SCHEUER. Donna, thank you very, very much.

We'll now hear from Mr. Hoke Smith, president of Towson State University in Towson, MD.

Mr. Smith has presided over this 15,000-student university since 1979, a university system that was restructured from five divisions into eight schools and colleges. Mr. Smith serves as chairman of the executive committee of the Council on Economic Education in Maryland and is a member of the Baltimore County Economic Development Commission.

We're delighted to have you here, Mr. Smith, and we appreciate your patience and forbearance. Please proceed with as much time as you may need.

STATEMENT OF HOKE L. SMITH, PRESIDENT, TOWSON STATE UNIVERSITY, TOWSON, MD

Mr. SMITH. Thank you very much. I have been quite impressed by this hearing today as well as the ones which preceded, and you wonder, as you get later in the day, what there is new to say. So I'm not sure I will add as much as I will emphasize.

In my prepared statement, I focused on expectation. I focused on emotion and passion, because I think that many of the other parts of the testimony have given facts and figures. To state the obvious, it is the person who learns, it is the school that teaches. If a person does not wish to learn, there is precious little we can do with the school that teaches. And education is part of a social system. There is formal education and there's informal education.

I refer in my prepared statement to what I regarded as one of the most seminal questions I was ever asked. It occurred in a parking lot in Des Moines, IA, while I was at Drake. A Peace Corps officer asked if I were the prime minister of a developing country and only had money for 3 years of formal education, what 3 years of an individual's life would I pick? I think it is a very interesting question, because it does show that there are limits to what we can finance in formal education, but it also brings up the question——

Representative SCHEUER. Well, what was your answer?

Mr. SMITH. At that point, I said early childhood, puberty and above 20 or when the person has settled into the labor force. I'm not sure I'd give the same answer now, but it wasn't a bad answer at the time.

Representative SCHEUER. That was a damn good answer. In other words, it wouldn't be 3 consecutive years.

Mr. SMITH. No, it wouldn't be 3 consecutive years. But it raised a very interesting question, and that is, what does an individual learn when they are not in school and who teaches them? Part of the problem, as we look at the Los Angeles gangs that you were talking about, obviously, we have a number of people who have learned a great many things. We just don't like what they've learned. And I think that raises a question that's been a theme throughout today, and that is, what has happened to our social system? What are the limitations of it as an educational system, and how well is it serving our youth, both in the preschool period and the postschool period? How well does it serve the dropouts? Where do they go for their learning? What do they learn on the street corner? What do they learn about the drug culture? What do they learn about the culture of welfare dependency without hope of providing a means of self-sufficiency?

So I would agree with Donna Shalala, we have to use what we have. We can't totally reform the whole system, and it's a very complex system. But I think we have to focus both on what the individual learns within our educational system and how we can utilize the out-of-school learning system.

Part of the problem is that our society has grown more complex. We have single-head families. We have rapidly changing technology. Some of the traditional social ways of learning aren't working. The apprenticeship system is good. We still use it, but in a stable society, you do not need the recurrent education that you need in a rapidly changing society. In a society in which the traditional family is the basic unit, you have an educational system which you don't have if both members of the family are working or if there's only one parent heading the family.

So I think that we have to take a look at what tasks the traditional social system in education is no longer as competent to perform and how we compensate for that with formal education. It's been intriguing to me that you have a group of higher educators, and although we have, I think, delicately pleaded for more money for higher education and more grant money, we have focused much more on the early childhood education. Perhaps this is where our social system cannot compensate as well for the kind of education needed, while we can at more advanced levels. Business and industry are picking up more of the educational load in on-the-job training. But at least there's an alternative social system for education, in addition to our formal educational system.

I think there's one other thing in dealing with passion and emotion about learning. It's very apparent in the different progress made by our new immigrants that a culture which honors education, stimulates students to learn, while a culture that does not, does not stimulate students to learn. Somehow we have to improve in our society, maybe by jawboning, maybe by using the bully pulpit, maybe by putting in money in matching grants, the legitimacy and honor that is accorded to education and to learning.

In the United States, and I comment about this briefly in my prepared statement, we have a love-hate relationship with formal learning. We honor it to some extent, but there's Hofsteder's comment of the anti-intellectual tendency of the United States.

I am intrigued by the fact that now, for reasons of self-interest, many members of the business community have joined with what were liberal positions of a decade ago because of manpower needs. Suddenly we recognized day-care centers, child care, and education as in the national interest. It's not ideological anymore; it's pragmatic. And we have to, in some way, through the infusion of more funds or development of more opportunities, improve the expectation that students can gain an education and improve the value which they accord to that education.

Somehow we have to deal with the low-income culture in which education has not historically been honored or has even been counterproductive. I think in some of our minority cultures, there is a real tension between the mainstream of American education and the way that that culture, whether that's black or Hispanic, defines itself. Sometimes members of such a culture have a real ethical or moral dilemma about maintaining their identity while participating in education.

Representative **Scheuer**. Well, are you agreeing or disagreeing with my quote from the assistant professor at the University of the District of Columbia who said that there is a sort of ethos out there in minority schools, that it's chic and its macho to fail, and that if you achieve real success academically, you have a real problem in your acceptance by your peer group?

Mr. **Smith**. I thought that was a very good paper that she presented to you last year. I would ask the question slightly differently, and I do not have an answer. This is really a question that I have been searching for.

Representative **Scheuer**. Well, ask the question.

Mr. **Smith**. To what extent, given the historical evolution out of slavery of our black population, have they been forced by our culture to define themselves in terms of not being white? Have we put them in that position? To what extent do they define themselves in terms of not being white, and then if they move into an educational institution in which we are, in effect, promoting the mainstream culture, do they have to sell out on their own heritage in order to be successful?

I don't know the answer to that.

Representative **Scheuer**. When you're equating not being white with not being learning capable.

Mr. **Smith**. I will get back to the other point. All people learn. It's not a question of if they're learning capable, it's who they choose to learn from and what they choose to learn.

Representative **Scheuer**. No, I'm saying that the ethos may be—and I'm no expert on this, I'm sort of groping, but as I get it from Signithia Fordham, there's sort of an ethos out there that the school system really wasn't designed for minorities. Going back to the past century, there was no expectation that blacks would be literate, that they'd read books, that they'd write, that they'd go on to higher education, and that the sense that the school system was designed to exclude them, is a lingering piece of baggage that minority students may carry, to some extent today; that the system isn't designed for them, that it was really designed to screen them out, to exclude them, to fail them, and that therefore in sort of self-protection, they may say, "We're not going to compete in that system that's going to give us a good shafting, and we're opting out of that system.

Is that a phenomenon that in your perception may exist to a greater or lesser extent?

Mr. SMITH. I believe it does exist. I think we have to be careful not to treat any of our ethnic groups as though they are monolithic. These is a wide range of motivations.

Representative SCHEUER. Well, obviously. I mean, half of the blacks in America have solidly emerged as middle-class people who are professionally skilled and very competent.

Mr. SMITH. One of the things that intrigues me, as the "Damn Yankee" from the Middle West who has now moved below the Mason-Dixon line, is the complex relationship about historically black institutions and the attitude of the black community toward those. I think that is——

Representative SCHEUER. Toward the black institutions?

Mr. SMITH. Yes. And the feeling that black institutions serve a very valuable role for many black students. Because they are controlled by the black culture, they legitimize learning within a predominantly black environment. And I think they raise some very significant questions about the character of our society in this year that may not be there in 20 years. But it shows the complexity of this question about how do we motivate and how do we sustain that motivation.

Just one more comment about that which is in the prepared statement. I agree with those that say that we—I make the point in the prepared statement that we have always had mixed support of education, private, State, individual self-help, and Federal. I think the balance has switched too much toward loan. I totally agree with the statement that you made earlier, the question you asked about: Are there people who, as a matter of principle, will not borrow? Yes, there are. There are many, and they come from a variety of cultures—East European, Hispanic, and black. There are a lot of our poorer students, who not only for financial reasons but for reasons of pride, will not borrow. So that particular access is not as effective with those groups. I favor, if we have limited resources, in concentrating our grant money more in the first year, because I think it does provide an expectation of access. It also means that those students who are not capable——

Representative SCHEUER. This is the point that Donna Shalala was making.

Mr. SMITH. Yes. And I think Bob Atwell made it too. Then if they do fail, if they find that they cannot achieve, they are not burdened by a debt that they are less qualified to pay. I don't know what the simple answer——

Representative SCHEUER. It's not the actuality that when they fail, they're not burdened with the debt if it's in the first year or two. If they fail in the first year or two, they're going to be burdened with a terrible debt that they won't be able to sustain.

Mr. SMITH. That is an element for some. There is also the actuality tied to the default rate, that if a student comes and goes heavily in debt, and then does fail, they still don't have the adequate preparation for the level of salary to repay that debt easily.

So I think that the problems of access are very complex, and I've been intrigued by the range of issues brought up here. They do get to the early preparation, to the health of the child, the ability of the child to participate in learning, to the articulation of the formal educational system with other learning systems and support, parental involvement, the quality of the education as the student goes through the K through 12 years, and then the expectation that there will be an opportunity to go beyond that.

I would agree with your question that you asked early on. We've developed from an agrarian society, in which one ciphered, in which education, being able to write, read, calculation was enough, in which the basic tricks of the trade depended on a strong back and a willingness to learn how to use it. We evolved to a manufacturing society with a factory model of education, somewhat inflexible, not geared to individual need. We are evolving now to an information society in which the education system which fit the agrarian society and the factory society is not adequate. And I think that it is an investment, and somehow we have to couple that investment with a statement to individuals that the investment is being made because education is important, both to the system and to the individual and that those who participate in the education are as honored as those who are doers. The learners and the thinkers are as honored as the doers in our society.

We have been a society in which traditionally, if we think back, many of our industrial era heroes were those people who were not formally educated but had a curious mind and many of our inventions came out of that period. There is still that track in American society, but I think we need other models of the successful person, which do incorporate those with more formal learning.

So it's a question of advocacy. It's a question of finance. It's a question of realization. I think these hearings are important and certainly contributing to the realization and the opportunity for advocacy. Matching funds are a great way of changing that advocacy to a statement beginning to honor the process, because in our society that means we regard it as important. Thank you, Mr. Chairman.

[The prepared statement of Mr. Smith follows:]

PREPARED STATEMENT OF HOKE L. SMITH

I am pleased to have this opportunity to testify on the issue of access to post-secondary education. The hearings you held last year on "Competitiveness and the Quality of the American Work Force" were very impressive and covered many of the problems confronting the American nation and our educational system. They highlighted the need for an educated and intellectually flexible work force. The issue of access does relate directly to that need.

It is difficult to imagine what our nation today would be like without the benefits of the GI Bill, the National Defense Act, and the succeeding grant, loan, and work-study programs. As we look back, could we honestly say that our nation would have been as well served had these programs not existed. Millions of Americans have been assisted in obtaining their educations, and they and the nation have benefited. In fact, I am one who has benefited from the Korean GI Bill.

But as important as assistance with the means of acquiring an education has been, the development of the expectation that college was possible has been equally as important to millions of individuals and their families. Without that expectation, many Americans would not have dreamt of a college education and would have started the process of settling for less while in grade and high school.

It is painfully apparent that access to education does not guarantee that all individuals will take advantage of that opportunity. The dropout rate in our secondary schools illustrates that all too clearly.

There is another element that must be present--education must be valued by the individual. It seems apparent that those cultures that honor education motivate their members to participate in learning and to benefit from schooling. If we look at our various immigrant groups, it appears as if those who value, honor, and support education achieve more.

We cannot separate access to education from the cultural support of education. It is not enough simply to make education possible. Education must be made desirable.

American culture has always had a love-hate relationship with learning and the intellectual life. Learning, particularly learning related to an economic or applied goal, has been valued. But this characteristic has coexisted with an anti-intellectualism in American culture. We have prided ourselves on being a practical and a pragmatic people. Many of our heroes have been self-taught. We have often valued "doers" above "thinkers" and applied education above theoretical education. This has been appropriate for an agrarian and industrial nation.

This tendency has been reenforced by our youth as a nation and as a people. We have tended to honor the energy and creativity of youth above the wisdom of age. We have had a philosophical streak of believing in the innate wisdom and goodness of youth. As a society, we have honored untutored youth in our music and in our fashions.

The provision of access is effective only to the extent that education is valued by our culture and its citizens. When education is valued by the individual, educational opportunity will be used.

I would like to make one additional point before turning more specifically to the issue of access. Over twenty years ago a Peace Corps officer asked me a seminal question. "If you were Prime Minister of a developing country and only had money for three years of public education, what three years would you pick?"

The question itself is provocative. But the questions that flow from it are even more intriguing. "When individuals are not in school, what are they learning and from whom?" "How does the formal education system relate to the educational systems provided by the family, the church, the community and the work place?" We cannot view the formal education system in isolation. It is only part of a larger educational system that involves the whole of society. To the extent that society is failing in its educational roles, we must turn to formal education for assistance. We have seen this happen as additional responsibilities have been assigned to the public education system.

We must face the fact that although we are not limited to three years of public education as was the hypothetical Prime Minister, there are financial limits on how much education we can provide. To be most effective we must view education as a whole and take into consideration what and from whom individuals learn when they are not in school. But in a rapidly changing society, access to formal education becomes more, not less, important as the larger society becomes more ineffective in its informal educational functions.

The two worker family is not the same educational unit as the farm family or the single worker family. The single parent family is not the same educational unit as the two parent family. A rapidly changing information based work place is not the same educational unit as a manufacturing plant based on the physical strength of its employees.

Education provides both individual and social benefits. The individual benefits through an enriched life and higher average income. But if education does not meet the needs of a productive society, then the individual benefit cannot be realized. Therefore, education is properly viewed as a social investment before it can be view as a personal investment. For this reason, we as a nation have encouraged private and public investment in education. The question is, is our current level and form of investment adequate to meet our social needs? I do not believe that it is.

Our traditional system of providing access is funded by a mix of support from the federal government, state and local governments, private organizations, corporations, and individuals, and by students and their families. Over time the balance of that mix has changed and its effectiveness in meeting social needs has changed. Among other techniques, support for access has been achieved by grants, loans, work study, tax benefits, institutional support to permit low tuition, private savings, work, and low salaries for faculty and staff. During recent years the balance has shifted toward self-help as both the federal and many state governments have decreased their relative levels of direct support and have increased the emphasis on individual payment. I believe that the balance has shifted too far toward individual investment. It is time again to rebalance the mix of funding by providing more direct support for access.

In my view, this rebalancing should have at least three components: an increase in direct, need-based grants; an increase in support for capital investment; and, an increase in support for educational equipment and learning materials.

The shift of emphasis from grants to loans has created a default problem. At a minimum, emphasis should be placed on supporting access to the first year of post-secondary education through grants. This policy would have two effects. First, it would increase the expectation by students and their families that college is an option. Second, if students find that they are unable to perform adequately, they will not be burdened by debts that they are ill-prepared to repay.

Grant funds should also be available to permit adults older than the traditional college age to reenter into the formal educational system. They are an essential part of our national human resources.

We are a continental nation composed of many states and ethnic groups. Not all of our states value education equally. Our states are not equally capable of supporting higher education. The economic condition of the states change. And yet our need for an educated population is national. Therefore, the federal government has an essential role in providing access.

I favor retaining a mix of grants, loans, and work-study. However, the balance among these should be changed toward more grants and less self-help. The current heavy dependence on loans has made many of our graduates debtors during the critical beginning years of their careers and family lives. This dependence on loans has also influenced career decisions toward higher paying fields.

But financial support of the individual is not enough. There must be an educational system with sufficient physical capacity to provide access. We have been living off of the capital investment that was made to accommodate the baby boom. Two major problems are developing in the capacity of that system. First, the physical plants are aging and are inadequate to meet the demands of our changing technology. We must maintain our physical infrastructure and that is becoming increasingly costly. Also, many buildings designed twenty-five years ago cannot easily accommodate the new technology without renovation. One simple example: offices designed for typewriters are often too small to handle the space requirements of micro-computers.

Second, the increase in college-going rates has maintained enrollments at levels near our plant capacities. When the demographic rebound occurs in the mid-90's, we will have inadequate capacity. This will be particularly true if individual financial access is improved.

Therefore, we need to consider seriously alternative means of maintaining and probably expanding our physical capacity.

Importantly, even if access is financially feasible and the capacity is available, quality is necessary if access is to be meaningful. Although funding does not guarantee quality, there are at least two areas in which funding is critically important: equipment and learning resources, and personnel.

Much of our instructional and research equipment is aging. It is increasingly difficult to keep equipment operational. The speed of technological change has increased the rate at which equipment becomes obsolescent. In many cases, research equipment must be state of the art. Although instructional equipment need not be state of the art, it must be sufficiently current to permit students to be educated to use equipment relevant to that used in the work place. Also, the increased cost of printed materials has made the maintenance of adequate library collections, particularly of periodicals, increasingly difficult.

Large numbers of our faculties will be retiring within the next 15 years. Because of the length of the educational pipeline we must give thought to the reinstatement of programs to encourage our brightest students to think of college teaching as a profession.

I do not mean this statement simply to be a plea for more money. Access to higher education is dependent on both emotional and financial capability. The improvement of financial access will improve the emotional climate for post-secondary education because it will become a more realistic alternative for many of our citizens.

I have discussed some related issues because neither can sufficient physical capacity in the future be assumed nor can we assume that the level of support will be sufficient to allow the maintenance of satisfactory quality.

The subject of these hearings is of critical importance. I have tried to cover a great deal in a brief statement. I will be pleased to address any questions that you may have.

Representative SCHEUER. Now if you had your wish list of two or three things that you could mandate to smooth the process so that young black or Hispanic children from impoverished families would maximize their skills, maximize their talent, achieve the maximum development of their own potential right straight through postsecondary, what are a few of the changes that you would advocate that we make with our systems to create the desire, the will, the expectation, the confidence and the sheer ability for them to move right straight through K minus 2 to grade 16?

Mr. SMITH. The first is a change in attitude. Let me refer to one other experience in my own background. When I was in the Army, I served for a while at Fort Benning as an executive officer for a research group that was trying to teach people with IQ's of 60 to 70 how to use a map and a compass for land navigation, and they succeeded in doing so. They simplified a number of concepts. But it illustrated to me that many people can learn; it's a question of how we structure the information we give to them. I think we first have to change our attitutde to assume that people are learning animals; that they will learn. It's a question from whom they learn and how they learn.

Representative SCHEUER. And maybe how quickly they learn.

Mr. SMITH. And how quickly they learn.

Representative SCHEUER. Maybe some people just take a little longer to learn the same thing.

Mr. SMITH. Then I think we need to reinforce the teaching and learning atmosphere of those people whom children naturally learn from, the family, or what serves as the family in their case, and that is part of parental involvement in the early childhood experience. We need to provide structured opportunities for formal education in those early years to compensate for what society no longer can do adequately because of changes in social structure. And then I think, as a minimum, as a first step toward access, changing the first year of postsecondary experience as much as possible to grants, 2 years, if possible, but start with one so that the expectation is there. Then as a final element for both the public schools, starting in the middle schools and the colleges, improve articulation in terms of teaching the student more about how to use formal education.

We have this in higher education. For example, university 101, developed at the University of South Carolina, teaches students how to use the system. Too often, we present a student with a complex college or university, throw a catalog on the desk and say, "Here, use it." Somehow we have to teach students how to use our formal education system better and that has to do with orientation to the use of formal education.

Representative SCHEUER. Mr. Smith, your testimony has been marvelous. We appreciate it very, very much, and we thank you very much for your patience.

Audrey Cohen, who is a valued and old friend of mine going back well over two decades.

Isn't that true, Audrey?

Ms. COHEN. That's absolutely true.

Representative SCHEUER. We worked together in the vineyards, producing an education system that would take people from poverty-laden backgrounds and move them into literacy, pride, and competence in themselves and into public service jobs; is that not correct?

Ms. COHEN. That's absolutely right.

Representative SCHEUER. Yes. Audrey Cohen founded the College for Human Services, which offers a bachelor of professional studies degree in professional and managerial services and business. She's also founder and president of the American Council for Human Services, which is a national organization created to represent the millions of human service workers, including those employed in legal services, mental health, child care and also in education itself; right?

Ms. COHEN. Yes.

Representative SCHEUER. We're delighted to have you here, Audrey, and we value our friendship with you and some of the great works that we were engaged in together 20-odd years ago. And I think time has proven us right. We were on the right track, and certainly through your continuing leadership over the last couple of decades, you've benefited tens of thousands, if not hundreds of thousands of people enormously, and you should be very, very proud of those rich, productive several decades during which you've been accomplishing so much.

So please take as much time as you may need, and then I'm sure I'll have some questions for you.

STATEMENT OF AUDREY COHEN, PRESIDENT, THE COLLEGE FOR HUMAN SERVICES, NEW YORK, NY

Ms. COHEN. Very good. Thank you. It's really a great pleasure to be with you today, Congressman. It has been a long time since we started our work together, and it's out of that early work that a lot of my present activities have developed. So I want to touch back on that just briefly. I'm going to deal with access to education in two areas.

The first area to look at is access to education for young children. I certainly agree wholeheartedly with the principle of universal free preschool education. However, we must ask ourselves whether we will achieve our goals by simply trying to get more children into the system through more and better preschool programs—or through trying to keep children in the system through a variety of services installed in the schools—or through improved teacher pay scales and other such ideas for change that have emerged in previous hearings and are certainly out in all the reports and the literature that exists.

My feeling is no. Even putting all these pieces into the schools will not change the basic problem. The basic problem is both retaining youngsters in school and helping them to become critical thinking, productive, significant adults and good citizens in our radically changed, very sophisticated global economy. The educational changes mentioned above will not make that possible, because they do not get at something very significant which I have been writing about for almost 20 years. That is the fact that we have shifted to a new kind of economy, and if you agree that the old systems of education may be irrelevant, then we have to redefine education for this new service economy. We really have to think through a totally different type of education that makes sense in a world where everyone, including ourselves, gives service to another human being.

We all work in service. Yet not one teacher in the public school system that I have ever heard has stood up in the front of a classroom and said to the kids, "You're going to work in insurance, or health, or teaching, or financial planning. You're going to work in one of the expanding areas of service. So you had better start understanding that you're going to use knowledge to give service to other human beings."

At least 76 percent of the American population work in service right now, and everybody agrees that by the year 2000, the figure might be 80 or 85 percent. In some places like New York City, we're close to that now.

We have to rethink education. Now let me go back to when you and I began our relationship almost 25 years ago. At that time I discovered something very significant with my Scheuer grant, and that was that all people who work in service, no matter what their specialty, do a lot of things in common. There are similar areas of performance that we all engage in. For example, managing tasks and projects is something a lot of people here in congressional offices have to be able to do. And that's something everyone has to do in the service sector. So is establishing professional relationships. You can't keep a client if you can't do some of that. These then are examples of areas of performance that everyone in service has to be competent in no matter what his or her specialty.

After helping to establish the paraprofessional movement in the sixties, we did a lot of research on the service professions, and on their common areas of performance. We said why not teach students the core tasks they will have to perform through life? If that's what they're going to do for the rest of their lives, if they're going to have to engage in these big areas of service activity, then why not make each one the focus of a semester's work? Why not organize learning around these performance issues, rather than around unrelated disciplines? And why not take the great works, take Shakespeare, take Freud, take Spinoza, take Machiavelli and relate them to what somebody really has to do in life.

So we've spent 25 years perfecting a new higher education system. But the exciting thing, I think, for the purposes of this community, is that in recent years we took the principle of relating all academic learning to one area of service activity each semester, and we began to apply it at the elementary and secondary levels of education. And we have found that doing this energizes even the youngest child to learn enthusiastically.

What happens when we apply these new ideas to elementary and secondary education? Little children who didn't feel that anybody cared about them now become the focus for making change in their own communities. They go 1 day a week to some agency or business. Now these are elementary, junior high, and high school kids, and they know that they must do something constructive to improve service out there in the community. All their subjects, their English, their math, their social studies relate to a significant purpose which they can grasp and which makes sense to them. A semester's purpose might be "I will help overcome poverty in East Harlem," or "I will meet the needs of my neighbors."

The child now knows why he or she is in school. Children know that math is going to have a purpose, that they will use it to accomplish a constructive action at an agency or business where they work 1 day a week, not for money but to learn to apply academic learning to action.

One of the things that you learned in some of your earlier hearings was how distant what happens in the classroom is from what happens in real life. We need models like the one I just described—models that say there is a bridge between the two, that you can learn every math problem, every piece of science in relationship to something significant, a purpose—a purpose which is going to make a difference in the world.

Structuring education this way works. We have over a 90-percent retention over 6 years at a junior high school that we run in East Harlem.

Representative SCHEUER. Ninety-percent retention over 6 years?

Ms. COHEN. That is right. That is correct.

Representative SCHEUER. That is a formidable record.

Ms. COHEN. It certainly is, and it's absolutely accurate. We've now been asked to work with two of what Commissioner Sobel calls the community schools. These are schools that have services like the kind that were described by some of the people here before your subcommittee—services which are put into schools, but without any fundamental change in the educational process. Now what happens if you put a kid into a school where the education is exactly the way it has always been, yet where you don't have the role models we all had when we grew up—parental and community figures who gave us wonderful pats on the back and encouraged us to study? We studied that math. We sat there and were bored, as Frank Newman said, for all those years. But kids today aren't going to stay bored. They're going to leave the classroom and the school. But if these children come into a classroom and they know that every piece of knowledge relates to something significant they can do, and they can actually take that knowledge out into the real world and turn those communities around, then they will stay in school, because they will see their own importance, and will want to make use of it.

Can you rely on the communities that are out there to change, communities where there are drugs on every corner, where there is incredible poverty, where the housing is absolutely unlivable? No. Who's going to make the difference? You can keep putting little pieces in the cracks, and you can call for various kinds of piecemeal programs, but they are not going to change the system. You need a new system of education and a system that focuses on purpose and helps the kids see their relationship to this whole economy that they're living in.

Let me now turn to the second issue of access to education. I'd like to focus on what happens to a single independent student at the college level. Now I can deal with all kinds of students on loans, but I would like to focus on the single independent student. This student is totally victimized by the present grant system—the Pell system. A single independent student who makes between

$9,000 and $10,000 adjusted gross income gets no Federal support. A full-time student who also works full time may make $12,000, $11,000, $15,000. Now these are independent students. These are poor students. These are primarily black students or Spanish students. But they get no support to go to college. They are out of the system. They get nothing. Absolutely nothing. They are the students today that are absolutely ignored by the system.

I ask you, as you rethink what we are going to do about loans or grants, to consider that single independent. I don't know where the process of discrimination started, and I don't know why it started. I suspect it started with middle-income kids whose parents did not cover their tuition—kids who came from homes that could have paid for their higher education and in fact did not. So someone, in their wisdom, thought it was a good idea to cut off the independent single person, so that these middle-income kids would not be able to leech off the Government. But I am talking about the many poor single independent people. Here's a person struggling, making their first attempt at being somebody in the world, getting their first foothold in a job in a service agency—let's say, a hospital, a mental institution, a school. These jobs don't pay very much. They pay nothing. These people are martyrs to the system. They give us excellent service all over the United States and they make almost no money.

They're the forgotten group. Twenty percent of our students at the College for Human Services fit this category. These are grown-ups who are not dependent. Now as soon as you're dependent, if you belong to somebody, you are more favorably treated financially. And as soon as you have a child, you get some funds. But if you're alone, struggling to make it, and you make a tiny tiny salary, $9,000, you are locked out of the system. And who can start to think of taking a loan, if they make an adjusted gross income of $9,000?

I would like to make a special plea for single independents, because they are increasingly entering higher education. If you want the child who is in high school to come into college, or the grownup who is trying to work and make it and not go on welfare, you have to change grant regulations. Current rules actually encourage an individual to go on welfare or to have children out of wedlock. As soon as you have a child, your higher education starts getting paid for.

So these two issues are the issues I'd like to focus on. The need to help single independents, and the need for a different system of education. You're not going to keep kids in school by promoting the present system, when you're talking about youngsters who don't have role models, who may be parts of gangs. For example, if you just extend the school day, you're going to push them out. And work study is also not enough. Let's face it. The statistics on work study aren't as good as they look. What does the kid do? Sure, he goes to work, but is he also back in school? Listen, I know. I've been in those high schools. I now run five schools, two in Florida, three in New York, and I know what they're doing in those other programs that call themselves work study and co-op ed. You'll get the kid out there, but you won't get the child to be taking in the understanding. Why? Because it has no relationship to his life or to his work.

Thank you.

[The prepared statement of Ms. Cohen follows:]

PREPARED STATEMENT OF AUDREY COHEN

THE SCHOOLS MUST RECOGNIZE THE SERVICE ECONOMY'S NEEDS

Effective education is today an urgent national priority. The global pre-eminence of the United States has always been based on its educational pre-eminence. At the height of the industrial era, our country possessed the most highly educated work force in the world. But today, with adult literacy rates of only 80% compared to Japan's literacy rates of over 90%, and with a national high school drop out rate of one third, our country is in serious difficulty.

I believe we must consider two root causes of this difficulty, in devising solutions to our educational problems. First is the rapid growth of a service economy which is displacing the traditional institutions of the industrial economy and requiring new skills of our workforce. Second is the decline of family and community, especially among the growing body of the poor in our country. If we take a clear look at these causes, we will come out with a single verdict. Our educational system must be fundamentally and radically restructured. Anything short of this restructuring will only increase our problems.

I am asking the Committee to consider the urgent need for radical restructuring as a framework within which to look at the viability of specific educational reforms. I believe that it is only in the context of the broader issues that how we should treat particular problems will come clear. I propose outlining for you not only my reading of our current problems but also the types of solution I believe need implementing. Let me start by turning briefly to the implications of the service economy.

Seventy-five percent of our population now makes its livelihood through providing services to others. Lawyers, bankers, retailers, accountants, teachers, mental health workers - all of these are service professionals. The transformation from an industrialized economy to a service economy has been extraordinarily rapid. And it has caused a great amount of dislocation in a society not prepared for transition. In the nineteen eighties alone 2.3 million workers were displaced a year, mostly from manufacturing sectors. Almost a third did not find new jobs. They simply could not meet the requirements of service jobs, and found no effective retraining.

The youth who are graduating from high school today are also poorly trained for service professions. The service economy is a high technology economy, dominated by complex information and communications systems. Its jobs demand higher rates of literacy than ever before, greater employee flexibility, and an increased ability to handle complex interpersonal relations. Good service professionals also need to know how to deliver not goods but high quality services which meet client needs. Education must therefore emphasize teaching communication skills, developing flexibility, and increasing literacy. And it must instill in our youth the importance of service - of working not merely for individual but also for social gain. Even the best traditional schools have trouble meeting these goals. They encourage passive assimilation of information, are insufficiently experiential, destructively individualistic, and too competitive. Education in a service society has to be different.

The traditional school system, established over a hundred years ago, remains in principle the same as when it was established. But our other institutions have changed drastically. Mass education trained people to live by the clock (a virtue in an industrialized society), to perform rote activities, and to be obedient. Among the elite, it fostered extreme competitiveness. But the qualities we need today, both in the mass and in our leadership, are different. If we cannot meet the demand for change, any incremental reforms will be meaningless.

While the needs of the service economy make contemporary education increasingly less relevant, the decline of family and community among large portions of our population have aggravated this problem enormously. The effectiveness of traditional academic learning depends on having strong support structures at home and in the community. Children need to be encouraged to read and to speak at home. They need to find promising professional role models in their parents, and to find abundant outlets in the community for meaningful recognition and for effective social involvement. Without these supports, academic learning is irrelevant and boring to children. And if school is boring, children tend to do poorly or drop out.

Between 25% and 40% of our nation's children are estimated to be at risk. The vast majority of them come from dysfunctional families and communities. Families whose heads of household are themselves illiterate or semi-illiterate, and who often provide little in the form of role models. Communities riddled with drugs, crime and poverty, also offer little in the way of vision towards a productive future. It is the rare child who will not be engulfed by this environment and will be able to make sense out of book learning.

Even that rare child will have to struggle with a sense that academic learning is poorly tailored to the needs of his or her future life. Academic learning alone does not foster effective problem solving or develop many of the abilities children need in adult professional life. Recent studies in fact point out that both what children learn in school and how they learn bear little relation to the kind of learning they will have to do outside of school. This sorry state results partly from the fact that it is established disciplines which determine what and how children study, and not some sense of overall purpose or empowerment.

How then do we give children an education which is relevant for them and therefore inspiring? Which helps to reverse the trend toward disintegration of community? And which prepares them for professional and civic life in a service society? By radically restructuring the school experience. The school should be not just an academic institution but also a primary force for social change. As a school participant, the child should be the agent of that change. Children should learn in school that they can make a difference in their own lives and in the lives of their communities. And they should learn that by applying what they learn in school to making social improvements in the community.

We should reorganize the entire curriculum around purposes which relate to service. As I have already pointed out, the traditional curriculum is not guided by an overall purpose. Its content is determined by the discrete subject matters taught in the various grades. How limited! I propose instead that each semester be focused around a purpose related to service. Such as "I will improve the health of my community" or "I will meet the needs of the children of my community." Then let children study their math, English, etc. as they relate to that purpose. And let the students carry out that purpose in the community, through specific programs for social improvement.

The kinds of purposes I have in mind would simultaneously enable children to take charge of their own lives, promote the improvement of local communities, and teach children the value of service in a service society. Let me give you an example of how a curriculum focused around a service-related purpose would work.

Let us imagine an eighth grade class whose semester's purpose is "to improve the community through fighting poverty." Students could focus on helping the homeless. As a group, they could organize carnivals to raise funds for the homeless, run food drives, and develop media events to publicize the predicament of the community's homeless. As individuals, they could develop specific projects for helping the homeless at agencies dealing with homelessness where they would intern one day a week.

Academic studies would help students help the homeless. Math skills could be applied to designing shelters for the homeless, or laying out the floor plan for a carnival. In social studies children would learn not only about historical patterns of poverty but also about the backgrounds and cultures of homeless people in the community, and about changing social services for the poor. English would come in handy for writing flyers to educate the public on issues involving the homeless, for giving speeches, and for soliciting help from politicians. In their art and drama classes, students would prepare special performances for the community to raise funds for the homeless.

Students would also be monitored at their internship sites by both faculty members and internship supervisors. They would be given responsibility for developing a specific plan of action to help improve their agency's services. They would work with both teachers and supervisors to guarantee that their project, or "Constructive Action," would be both socially and educationally rewarding. And a special class in school would be devoted to discussing, planning, processing and evaluating service experiences. Learning would have a meaning. Students would see that they could use it to turn their own lives around, along with the lives of people around them.

Purposeful and service-oriented learning would take different forms in different grades, and would always be moulded by the overarching purpose of the semester. In the earlier elementary grades, for example, children would learn service values primarily by developing healthy relations of cooperation and teamwork through Constructive Actions in the school. By third or fourth grade, they would start exploring community issues through short term group Constructive Actions under teacher supervision outside the school. In middle school, children would begin to explore individual internships once a week in agencies or businesses outside the school. In high school, internship experiences would acquire increasing value, and students would be challenged to set themselves increasingly demanding goals relating their class work at their internship sites.

Many high schools now are having students engage in cooperative education and work study programs. But they are not radical enough. They do not require teachers to relate math, English and science studies directly to practical service problems to a larger purpose outside the classroom. They simply ask children to work, and to study. But schools should become a conscious force for social improvement, and children should be given the responsibility and right to care about their environment. If that happens, the school system will find the loyalty of its students, engage their energy and will be able to teach them effectively. And we will also be preparing our children for professional lives of dedicated service in a service society.

Unfortunately, the search for solutions to our educational problems has been all too piecemeal. Lengthening the school day, increasing teacher pay, providing more preschool education, etc., are all extremely valuable. But they can only become powerful instruments of social change when the content and structure of schools are changed to meet the needs of the service economy. Without these basic alterations, the intention behind incremental changes will be thwarted by inertia, bureaucratization, hostility and ignorance. But if we do begin to understand and countenance these basic alterations, we will begin to harness the productive potential of our society.

FEDERAL FINANCIAL ASSISTANCE TO SINGLE INDEPENDENT STUDENTS

I would like to address my comments concerning federal support for postsecondary education to the problems facing single independent students. The overall need for federal financial support increases along with the rapid rise of tuition costs and declining real income levels of a growing portion of our population. But the situation is most severe for single independents who are gainfully employed. In fact, the discriminatory pressures exerted against these individuals are such as to encourage them either to leave gainful employment and get on welfare rolls; or to have children, despite the costs of the latter. We surely do not want to encourage either of these choices.

Because PELL assistance is based on a needs analysis, and there are no clear cutoffs for assistance, the figures I will offer you are approximate only, and are based on the experience of the College for Human Services. However, the story the figures tell is clear. And the story is sad.

This past semester, single independent students at the College whose adjusted gross incomes were $10,000 or more received **no federal financial assistance** for their education. In contrast, single parents of two with adjusted incomes of close to $16,000 received close to full federal assistance of $2200 per year. And married students in a family of three received anywhere between minimum and maximum federal assistance with adjusted gross income ranging between $20,000 and $30,000 per year. Clearly, the cutoff for **minimum federal** aid to single independents is both excessively harsh and discriminatory. In the North east today, it is extremely difficult to survive on $10,000 adjusted gross income a year, let alone finance an education for oneself.

Those independent students who did receive aid received less than they could reasonably manage with. Students whose adjusted gross income ranged between $8,000 and $9,000 received somewhere between $400 and $650 dollars a semester for two semesters a year. Students with adjusted gross income of less than $8000 received increasing financial support from **PELL**, up to the maximum of $1100 per semester, for two semesters a year.

The failure of the federal government effectively to support education for single gainfully employed independents cuts the only lifeline these people have - their hope for a reasonable future based on a reasonably priced education. When the cost of education is too high, the social price also becomes too high. The federal government must take action to remove the excessive hardship currently confronting single independents.

Representative SCHEUER. Well, you've given us some very provocative testimony, Audrey. I don't have to tell you that you've given us a great deal to think about. You're really describing quite an alternative model of education.

Is that in secondary or is that in elementary and secondary also?

Ms. COHEN. We're focusing on elementary education, although the basic principles of our system of education work at all levels, from elementary right through graduate school. By the way, I don't agree with the comment that was made earlier about the unions being so negative. I think some of the union leadership is really starting to see that they're in trouble, that we're all in trouble with our schools and we need to do something. The head of the United Federation of Teachers in New York has called the new system of education I described the future of education. She has asked us to take over several schools in the city and to model them along the lines of this new system.

Representative SCHEUER. You're talking of Ms. Feldman.

Ms. COHEN. Yes, I am.

Representative SCHEUER. She's a very terrific person.

Ms. COHEN. She's terrific.

Representative SCHEUER. Unfortunately, she's unusual. There aren't many like her in education unions.

I know that when we took testimony about extending the school year and school hours, keeping schools open evenings, weekends, and holidays as community resources, we got a significant amount of flak from teachers' unions around the country. It might be that if we ask teachers to work a full year, let us say, or longer hours, we're going to have to make some changes. Maybe we have to give them more time off. Maybe we have to hire more teachers to do that. It seems axiomatic, if you go from a 9- or a 9½-month school year to a 12-month school year, either you have to raise the bridge or lower the water. Either teachers are going to have to be asked to work very, very much longer hours, longer days, weeks, and months, and maybe some will want to do that if they receive increased compensation for having to give up several months over the summer when they may have been carrying on other jobs, or I guess it may be that we'll keep the schools open, but we won't ask teachers to work a 12-month year, we'll hire more teachers. We'll attract more teachers into the system.

Certainly, the teachers can't be expected to absorb the burden of working substantially more hours, days and months without compensation, and it may be that the choice could be theirs as to whether they want to work longer hours, days and months at increased salaries, or whether they'd rather more or less continue their present lifestyle. And that would then leave us with the option of adding more teachers to the system, since it's now a larger system.

Well, you've given us a great deal to think about.

Should I ask you the question that I asked the others? If you had your druthers, what two or three changes would you make in our system to encourage the flow of young people before they come to the Head Start program, aged 2, right straight through postsecondary? What impediments would you remove, what incentives would you provide?

Ms. COHEN. I agree with the major points that you made during the testimony that I heard, that is, that all children should have access to preschool education, and that everyone should have access to 2 free years of college education. I think if parents thought that preschool opportunities provided a good environment for their children, they would certainly want to enroll their children in these.

Representative SCHEUER. And take advantage of new opportunities themselves, to learn about parenting, to learn about how to enhance the health of their kids for both those already born and those to be born in the future. It involves a great deal of benefits and learning on the part of the parents.

Ms. COHEN. I think what I'd like to see is this whole new environment, this reinvigoration of the community that could come from the child's participating in the community from almost the beginning of elementary school, participating in service. I think that pulling the agencies and businesses into the school system, integrating their interests and school interests, begins to get the parents interested too. "My child is going to have an opportunity to do something real. Perhaps there's hope for my kid to have a decent job someday. Gee, he's now in the district attorney's office, seeing the world and doing a little of the intake work."

Representative SCHEUER. At what age would a young child be able to do intake work in the D.A.'s office?

Ms. COHEN. I would like to see them—and we have seen them at our elementary schools—beginning to do work outside the school in the fourth or fifth grade. At that time they do group constructive actions, that is, they work together to do something significant for the community. We don't let them go out all by themselves to a particular place to do service until they're in the sixth or seventh grade. But by seventh grade, a child can go to a nursing home, a day-care center, a computer center, or a local deli. Children at this age can do real jobs and begin to take on service projects that help the community. Over time these service projects grow into major acts of service improvement, as children mature and learn more about their own power. So we can start very, very young to have children take their knowledge and skills—I mean, what is really extraordinary is to see the child make the connection between math and science and English and what they do outside. And that's the key. If we don't make these connections for these children, they're just not going to want to come to school.

So I would like to see that.

Representative SCHEUER. Well, you've made a convert out of me, Audrey. I knew of some of the marvelous things you were doing several decades ago, but I wasn't aware of this new development, and I'm very, very impressed.

I very much appreciate your coming down here today. You've contributed something really quite new and different to the stream of commerce down here, let us say. I'm also grateful for your patience and forbearance. It's now almost 2 o'clock.

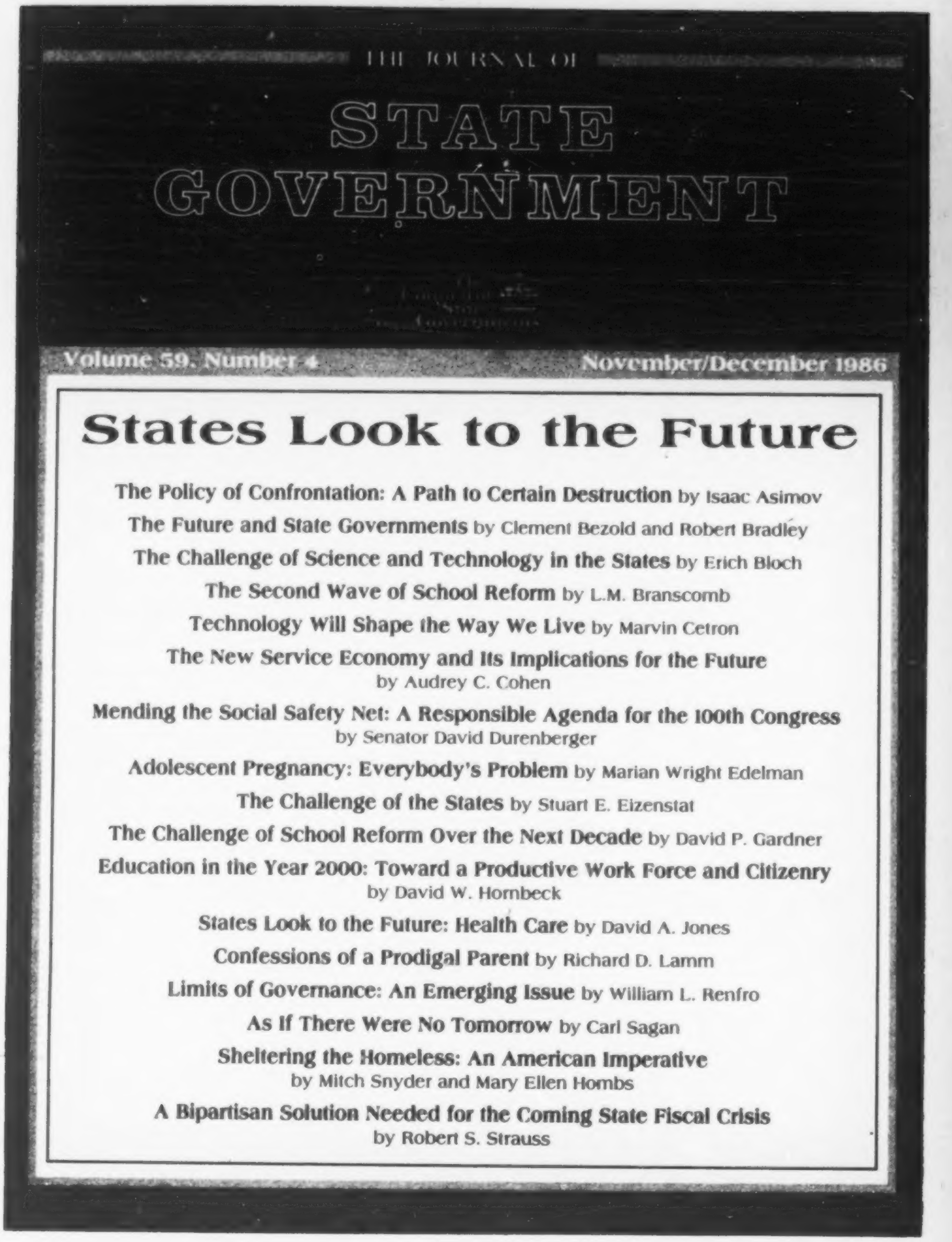
Ms. COHEN. I had you all to myself. It was wonderful! [Laughter.]

Representative SCHEUER. We've enjoyed it, and we are very grateful to you for coming and contributing. Thank you very much.

Ms. **Cohen**. Thank you. With your permission, I would like to submit for the record an article that I wrote and which appeared in the Journal of State Government on the subject of the new service economy.

Representative **Scheuer**. Certainly. Without objection, the article entitled "The New Service Economy and Its Implications for the Future," written by Audrey Cohen, and which appeared in the November/December 1986 issue of the Journal of State Government will be inserted at this point in the record.

[The article follows:]



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States Look to the Future

The Policy of Confrontation: A Path to Certain Destruction by Isaac Asimov
The Future and State Governments by Clement Bezold and Robert Bradley
The Challenge of Science and Technology in the States by Erich Bloch
The Second Wave of School Reform by L.M. Branscomb
Technology Will Shape the Way We Live by Marvin Cetron
The New Service Economy and Its Implications for the Future by Audrey C. Cohen
Mending the Social Safety Net: A Responsible Agenda for the 100th Congress by Senator David Durenberger
Adolescent Pregnancy: Everybody's Problem by Marian Wright Edelman
The Challenge of the States by Stuart E. Eizenstat
The Challenge of School Reform Over the Next Decade by David P. Gardner
Education in the Year 2000: Toward a Productive Work Force and Citizenry by David W. Hornbeck
States Look to the Future: Health Care by David A. Jones
Confessions of a Prodigal Parent by Richard D. Lamm
Limits of Governance: An Emerging Issue by William L. Renfro
As If There Were No Tomorrow by Carl Sagan
Sheltering the Homeless: An American Imperative by Mitch Snyder and Mary Ellen Hombs
A Bipartisan Solution Needed for the Coming State Fiscal Crisis by Robert S. Strauss
]

INTRODUCTION

What follows are insights and observations from some of the nation's leading thinkers. With these papers, they join us in the exploration of the theme, "States Look to the Future," which guided the 1986 Annual Meeting of The Council of State Governments.

From the worlds of letters, science, government, politics, business, industry, public interest, and education, these individuals offer state leaders their unique perspectives on what the future holds for the states of the nation.

Writer, historian and biochemist Isaac Asimov exhorts us to abandon the policy of confrontation and embrace cooperation in an era of change so profound that it threatens the very foundation of our society. President and founder of the College for Human Services Audrey C. Cohen recommends a new service ethic, a "system of education and work . . . organized around helping other people." Futurist William L. Renfro, who observes "situational ethics on a societal scale" in America, suggests that "declining public acceptance of governance" will limit future state leaders. Scientist and author Carl Sagan cites several problems — from unacceptably high rates of infant mortality to lead poisoning to "rampant illiteracy" — as evidence of a disregard for the future.

This is a provocative collection of essays that, while it sometimes chastises government for its failures, offers promise in its very existence. It is proof that Americans from all walks of life are not only concerned about the future of this nation but have concrete, constructive ideas about how best to prepare for it. What's more, they recognize state leaders as the guides who must chart our course into tomorrow.

On behalf of The Council of State Governments, I thank each of the authors included in this collection. Their collective wisdom is once again proof that we are a nation of individuals who are ready and eager to meet the challenge of the future.

Governor Richard Bryan
Vice President CSG

The New Service Economy and Its Implications for the Future

by Audrey C. Cohen

The Challenge

As a nation, we are on the verge of one of the most fulfilling times in our history. Presently, over 75 percent of all Americans work in the service sector of our economy, and by the year 2000 that figure is expected to reach 85 percent. Service, a value which our society has always held in high esteem, passing it down from one generation to the next, has now become the way we earn our living. Now, more than ever, it is crucial that we learn to serve others — not just because it is a positive, altruistic good, but also because by doing so we will be learning to survive and prosper in the service economy.

The problem, and our greatest challenge, is that neither education nor work as presently structured prepares us or future generations for this transition. How do we know this to be true? The symptoms are all around us. One such symptom is the fact that, despite our dramatic technological advances, we are falling behind in world economic leadership. What can we do about it? The schools we attend, the businesses and agencies in which we're employed, and the communities in which we live are all dramatically out of sync with each other. A total shift of all these disparate elements of our society to an ethos of service is required.

Problems Our Nation is Currently Facing and Possible Solutions

Why is there such a high level of disillusionment among our nation's youth, as evidenced by the increase in drug use, vandalism and the school drop out rate? The main reason is that many of our students' school experiences lead them to believe that there is no purpose whatsoever in remaining in school. The system does not teach the connection between life in the classroom and life in the outside world. A solution would be to have an educational system that gives these students a sense of purpose by showing them that A) What they learn is directly relevant to their own lives and B) What they learn can be applied and used to make a positive difference in the world.

One strategy would be to have each high school and junior high school semester focus on a purpose that teachers could directly relate to their students' lives and to service. All the classes that the students take would relate to that purpose. For example, in a junior high school semester focused on *improving service to the community*, all the knowledge of the semester, from the origins of American inventions and the use of the scientific method to the use of writing, and measurement in mathematics, would be focused on how the knowledge can inform the student's effort to improve service to other citizens.

Students, then, could take what they have learned and apply it to their internship or work site. For instance, one child might organize special activities within a day care center that would enhance the socialization skills of the children. Such an approach that takes knowledge and theory from all disciplines and applies it to a focused purpose that is meaningful for students in their daily lives, both within and outside the classroom, would make learning come alive. This would motivate students to stay in school — and to learn.

Why have we produced an entire generation of professionals who are specialists? Effective leadership for the service society demands people who are capable of looking at issues in a new, multi-faceted and comprehensive way — leaders who see the big picture. The machines of the new technology, although continuously expanding their ability to give us knowledge, thus far can only think in a linear, and therefore, limited fashion. In a service economy, the linear approach is not sufficient. We will need leaders who can *use* that knowledge in a total context viewed from a variety of perspectives, the way the human brain naturally functions, to solve a multiplicity of problems.

For example, the regional planning of states' natural resources requires knowledge of *supervision, teaching and communication*,. and *the management of change*, to name a few of the critical areas of activity that are necessary for productive service. We must begin to see that successfully accomplishing the goals and purposes we face in life requires an understanding of the broader implications of our actions. The solution is to develop generalists who think in depth from a variety of perspectives and who are flexible and adaptable at solving problems.

Why are so many of our citizens self-centered and ill-equipped to think beyond themselves? The problem with a "me" generation is that it leaves very little room for a "you." Since it is the integral focus on people that makes the service economy so unique and exciting and that differentiates it from all others, we need a system of education and work for the service economy that is organized around helping other people. Such a system, in which businesses, service agencies, schools families and the whole community work together, would help students develop an understanding of the relationship between one's own needs and the needs of others.

A solution would be having students perform "constructive actions" at businesses, hospitals, homes for the aged and other sites within the community. For example, in a high school semester that has the performance area of *maintaining health and well-being* as its primary focus, a student working with a withdrawn and lonely widow in a senior citizens' center could help her find new interests that would restore her involvement in life. Since all the knowledge covered in the semester, from biology to American history, was organized around health and well-being, the student could easily apply what was learned to the world outside of class — in this case, a center for senior citizens. Of course, such community service has value in and of itself, but the constructive action goes beyond this — it is a way of building a bridge between knowledge learned in school and action. In such a system, everyone, both the giver and the receiver of service, benefits and the result would be a "we" rather than a "me" generation.

Why do we have so many educated citizens who don't know how to use what they have learned? It isn't the mere acquisition of knowledge but the way people use it that makes the critical difference. Knowledge divided into traditional disciplines without a common purpose just doesn't fit into a service-oriented educational system. Everyone working in a service occupation, if they are effective, improves the lives of others as an integral part of their job. Thus, the rise of the service economy gives us the potential to create a society in which one's success is determined by helping other people.

A service curriculum, therefore, would have no departments and disciplines as we now know them. All of the knowledge taught would be organized around purpose, a separate performance area of effective human service practice covered each semester. If we turn education right side up and focus knowledge on purpose, rather than the present system in which knowledge is serendipitously accumulated, we'll have a process which radically changes the way people think and act.

For example, in the Business Program at the College for Human Services, one semester is focused on *developing a marketing strategy*. A student learns in the classroom how the concepts and theories of Freud and Shakespeare, as well as Smith and Keynes, are connected to the focus of the semester. Each week at their respective corporations, students use this knowledge to develop, for example, a program to help customers use a new banking service.

In this way material from the liberal arts and the business disciplines would be directly related to the particular purpose being covered. Thus, instead of seeing knowledge as a pile of static material lumped into various categories, we could envision the vast body of knowledge as being a living crystal, growing in all directions simultaneously. When such theoretical learning is integrated with practical experience, from the very beginning of the educational process through graduate school, students develop the ability to not only think critically but also to apply what they learn.

Why have values become a major national issue? One of the most destructive problems our country is facing is the flagrant lack of moral values and ethics among so many Americans. It's no wonder when we have a system that either teaches ethics and values abstractly, or doesn't teach them at all. We must begin to realize that people cannot think, work or live in a moral vacuum. A nation such as ours, at a new stage of development, requires a new value system — one built around service. Knowledge and action must be informed by a value base. We must recognize the fact that service is everywhere and that all of us perform a service role — from parents raising children and teachers in the schools, to corporate managers and state governors. Without a strong service ethic, the service society is impossible.

Fortunately, it is possible to teach a strong service ethic. It's done by showing people that seemingly abstract values have a great impact on themselves and others by relating subject matter to service in the community. For example, in an elementary school semester focused on the performance area of *improving the environment*, students would learn the connections between the semester's focus and all the knowledge studied during the semester, from George Washington's willingness to commit himself to service to the community and nation, to Rachel Carson, whose writing of *Silent Spring* encouraged thousands of people to work for the improvement of the environment, to physically going out and testing the local water supply and analyzing the results in a science class. One child's constructive action could be organizing his/her friends and neighbors to set up a playground in a vacant lot. Each child would assume responsibility for a different constructive action and each one would use the knowledge learned in the classroom to improve the world outside.

In this way we will develop a generation of activists — people who are keenly aware of the world outside and who *act* positively on that awareness. We must remember the ultimate goal for people living in a service society is empowerment. This means that people would become increasingly more effective in managing their own lives and in recognizing and meeting their own needs and the needs of the citizens they serve. This would also help others to fulfill their potential as creative, responsible and productive members of society.

Why is our nation so fragmented instead of being a cohesive whole? In our society we erroneously encourage such a fragmentation by putting home, school, work and community into separate little boxes. A successful service society demands that we see the inter-relationships between these various autonomous institutions, and that each see the responsibility of itself and of the others and operates in a spirit of cooperation and unity. The present generation can pull the disparate units of society together and it is our hope that the ideas presented in this paper will help make this possible.

A Conclusion and a New Beginning

In the years ahead, America will need a work force that knows how to turn facts learned in school into creative thinking on the job and positive involvement in the community. It will need citizens who are conscious of their responsibilities to others and to society in general. In both areas, a new form of collaboration between the employers in the community, the educators, the parents and the school system is the key to America's future. The problems America is confronting today can be solved — the solutions suggested in this paper can provide a solid foundation upon which a successful, effective service society can rest.

Society is ready and eager for a new social initiative of major proportion. We are in a difficult stage of transition and we need effective leadership for the world of service which will dominate the 21st century. This paper is offered as an outline for the new society. We are indeed on the threshold of an exciting new beginning. The service revolution provides the spark — and we can't afford to fail to take advantage of the opportunity.

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Ms. Cohen is president and founder of the College for Human Services.

Representative **Scheuer**. This ends 11 days of hearings on how our society can improve our education system to produce a more successful, more competent, more skilled, more competitive work force and also a group of citizens who will be more contributing to society, more confident of themselves and who will provide a rich, supportive, contributing citizenry for our democracy. We think it's been an enormously interesting set of hearings. We hope you have to.

Merry Christmas and a Happy New Year to all.

[Whereupon, at 1:52 p.m., the subcommittee adjourned, subject to the call of the Chair.]

[Mr. Joseph S. Murphy, chancellor, City University of New York, New York, NY, was invited to participate in this hearing day, but was unable to do so. His statement follows:]

STATEMENT OF JOSEPH S. MURPHY, CHANCELLOR, CITY UNIVERSITY OF NEW YORK, NEW YORK, NY

Chairman Scheuer and Members of the Subcommittee:

Thank you for giving me the opportunity to testify today on a subject that is of such vital concern. As the nation looks forward to a new Administration all of us in academia--and all other Americans concerned with education at every level--welcome the opportunity to reassess our programs and try to determine how they can be improved. We are grateful that the Joint Economic Committee, and specifically this subcommittee, have taken the lead in that effort.

As Chancellor of The City University of New York my most immediate concern is naturally with postsecondary education and it is in that area that I will offer my comments. I want to say at the outset, however, that I am fully cognizant of the linkages between my segment of the education universe and all others; my colleagues at CUNY devote considerable effort and attention to strengthening those links. During eight difficult years higher education generally has resisted the temptation to indulge in internecine warfare with the elementary-secondary or preschool or vocational sectors in a fight for a larger slice of a smaller pie. If I may modify a phrase from an earlier era, we know that what's good for education generally is good for The City University of New York and all other universities--and vice versa.

As you, Mr. Chairman, are aware, my own institution holds the distinction of being the largest urban public university in the United States. We enroll over 188,000 students and though that total includes a significant number of middle or upper-income individuals, the fact is that CUNY's population includes a vast number of men and women who rely on federal assistance, for whom federal programs were designed, and who are adversely affected in some very dramatic ways when federal programs are curtailed. Approximately 35% of our undergraduate students (about 55,000 people) come from families with incomes below $12,000 a year. More than three-quarters work while in college, either on a full- or a part-time basis--and, they typically use their income not for trips to Fort Lauderdale but for groceries, textbooks and rent. About 70% are the first in their families ever to go to college. Three out of five are non-white. In a typical freshman class, two students out of every three demonstrate a need for intensive remediation before they can begin college-level work.

Programs like Pell Grants, College Work Study, guaranteed student loans, and Veterans' Cost of Instruction make it possible for these students to participate in higher education. About 100,000 CUNY students get federal assistance of one form or another, and if the programs did not exist, most of them would not be in school. It is as simple as that. If they were not able to continue their education, not only would it be a human tragedy for the students denied an opportunity for social and economic mobility; it would be a calamity for the City of New York and for the economy of the region of which New York is a part.

The statistics make the case convincingly. Between 1979 and 1987 New York City saw 130,000 manufacturing jobs, which typically required little formal education, disappear or go to other parts of the country or to the Third World. Major industries that had once been a cornerstone of the local economy, including the garment trade and the shipping industry, found themselves struggling to survive, laying off workers, and hiring few if any new people. Opportunities for those without any college education vanished. While there are a number of other contributing causes, it is clear that much of the shocking problem of homelessness stems from the lack of employment prospects for people with limited education.

Yet at the same time, New York has experienced a net increase in private sector employment of about 350,000 jobs. These are positions in the communications, health care, and financial industries, and elsewhere, that typically require advanced training and very often a college degree. These businesses have had a hard time filling positions. At a time when 130,000 or more unemployed manufacturing workers have been looking for jobs. Partly for that reason many businesses leave New York, with a resultant negative impact not only on our tax base but on the general quality of City life. It is easy to see what is happening: As the basis of our economy changes, the need for an educated workforce grows dramatically.

With the help of federal programs, CUNY and other colleges in New York try to meet that need. In the past five years we have graduated approximately 10,000 people with baccalaureate degrees in business, 3,500 computer specialists, 4,000 teaches, 1,700 engineers, 3,600 health care professionals--and, at the community college level, 4,500 data processors, 3,500 nurses, and 2,000 medical technicians. Even more gratifying, among the total 100,000 or so people to whom we granted degrees in that period there were several thousand others who have continued their education at our own university or elsewhere. Many of these are the people who will be or have become already the doctors, lawyers, corporate leaders, government officials, writers, artists and philosophers of the next generation. CUNY has produced eleven Nobel Laureates in our history, and I am sure that among our 188,000 students today there are several who will join that list.

The question before the nation is how Federal programs can be strengthened to enable us to do a better job, to reach more people, and assure that the quality of what we offer remains high. The question before this body is how the Congress can build upon the very strong record of the 100th Congress to enhance the national commitment to access and equity.

I have four recommendations to offer in that regard.

First, we should act now to assure that the Pell Grant program is fully funded. The current maximum benefit of $2,300 should be increased to at least $4,000 a year as a first step to making student choice once again a reality in our system and to making college attendance a realistic option for the truly low-income. Even at my own relatively low-cost institution, Pell Grants do not cover the full cost of attendance; at higher-cost schools they cover barely a fraction of tuition and living expenses. The original goals of the Higher Education Act of 1965, as amended in 1972 and subsequently, were to promote both access and choice. Those goals remain unmet as long as grants are limited to an unrealistic amount.

Second, the Congress should act in the coming year to reverse the trend of the past eight years of emphasizing loans as the primary instrument of assistance, in place of grants. The results of the Reagan policies in that direction are now becoming clear: excessive debt burden for people at the most vulnerable level of society, unacceptably high default rates, effective foreclosure from graduate study for most of the economically disadvantaged (which translates into a denial of opportunity for many minority group members particularly) and even an impediment to completion of undergraduate degrees.

Loan programs have an important place in the network of federal assistance vehicles--but that place is as a support to the truly middle-income. In my city, a student form a family of four with an income above $33,000 a year is precluded from Pell Grant support and must rely on loans; I submit that no rational person familiar with New York living costs would consider that someone coming from a family whose income is $24,000 has no need for or entitlement to grant support.

There ought to be a more sensible demarcation of loan versus grant eligibility that provides some grant support for people in the $23,000 to $30,000 income range, that provides more than the $600 or $700 grant per semester given to people whose family incomes fall between $15,000 to $20,000 a year, and that continues to make loan programs accessible to students at what are truly middle-income levels.

Third, I would urge dramatic increases in funding for the TRIO remedial programs, on which the government currently expends less than $200 million. The purpose of these programs is to enhance the prospects of low-income and minority students (who, in combination, represent 75% of CUNY's enrollment). I will be frank to admit that one of the great concerns I have, and one that I know my colleagues at other urban public institutions share, is that our retention rate for minority students from working-class backgrounds is unacceptably low. We keep experimenting to find the right mix of remediation, counseling, financial support and other assistance to help highly-motivated students meet our standards--but when we provide at some campuses one curricular guidance officer for every 500 to 1,000 students, we have a problem right from the start. TRIO and programs like it can help us provide the services, determine the best combination, and alleviate the attrition problem.

Fourth, in somewhat different sphere, I ask that Congress provide far more extensive support for the construction and renovation of college and university research facilities. The first step in that direction would be implementation of the $250 million program recently enacted by the Congress to provide support to the National Science Foundation in this effort. Other, more broadly-based programs should follow.

I know that at my own University as at most others, capital programs have frequently been relegated to low priority and put in abeyance during periods of fiscal stress. The result is not just a set of dilapidated facilities; of even greater concern, it is a decline in our ability to help faculty and others do research. Particularly in the sciences this has implications not only for our own institution but for the nation as a whole. There is now a pretty firm national consensus that the competitiveness of the American economy depends heavily on research and development, much of it originating in pure or applied form at American universities. Support for upgraded facilities represents not just institutional aid, but an investment in the productivity of the nation's economy.

These four recommendations --de-emphasis on loan programs as the basic student support mechanism, full funding of Pell Grants, increased funding for TRIO and similar programs, and aid for the rehabilitation and construction of research facilities--represent a modest agenda, within the context of the nation's and our own institutions' needs. I believe, however, that they build on a firm foundation of national support for higher education and will begin to help us better fulfill the goal this Congress and those past have set for us--to make access to higher education a reality for every American capable of attending college, and thereby to strengthen the social, economic and political fiber of our national life.

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